

11 REFERENČNÍ SEZNAM

- Acsi, A., & Acikada, C. (2007). Power production among different sports with similar power production. *Journal of strength and conditioning research*, 21, 10-16.
- Adams, K., O'Shea, J. P., O'Shea, K. L., & Climstein, M. (1992). The effect of six weeks of squat, plyometric and squat-plyometric training on power production. *J. Appl. Sports Sci. Res*, 6, 36-41.
- Aleman, J. A., Pandorf, C. E., Montain, S. J., Castellany, J. W., Tuckow, A. P., & Nindl, B. C. (2005). Reliability assesment of ballistic jump squats and bench throws. *Journal of strength and conditioning research*, 19, 33-38.
- Baker, D. (2001). Comparison of upper-body strength and power between college-aged rugby league players. *Journal of strength and conditioning research*, 15, 30-35.
- Baker, D., & Nance, S. (1999). The relation between strength and power in professional rugby league players. *Journal of strength and conditioning research*, 13, 224-229.
- Baker, D., Nance, S., & Moore, M. (2001a). The load that maximizes the average mechanical power output during jump squats in power trained athletes. *Journal of strength and conditioning research*, 15, 92-97.
- Baker, D., Nance, S., & Moore, M. (2001b). The load that maximizes the average mechanical power output during explosiv bench press throw in highly trained athletes. *Journal of strength and conditioning research*, 15, 20-24.
- Baker, D., & Newton, U. R. (2005). Acute effect on power output of alternating an agonist and antagonist muscle exercise during complex training. *Journal of Strength and Conditioning Research*, 19, 202-205.
- Bartonicz, K. (2000). Javelin throwing: Problems and prospects. In V. M. Zatsiorsky (Eds.), *Biomechanics in sport: Performance Enhancement and Injury Prevention* (pp. 401-434). Oxford: Blackwell Science.
- Billeter, R., & Hoppeler, H. (2003). Muscular Basis of Strength. In P.V. Komi (Eds.), *Strength and power in sport* (pp. 50-72). Oxford: Blackwell Scientific Publications.
- Blazevich, A. J., Gill, N., & Newton, R. U. (2002). Reliability and validity of two isometric squat tests. *Journal of strength and conditioning research*, 16, 298-304.
- Bober, T., & Zawadzki, J. (2003). *Biomechanika układu ruchu człowieka*. (2nd ed.). Wrocław: Akademia Wychowania Fizycznego.

- Bosco, C., Viitasalo, J. T., & Komi, P. V. (1982). Combined effect of elastic energy and myoelectrical potentiation during stretch-shortening cycle exercise. *Acta Physiol Scand*, *114*, 557-565.
- Bottinelli, R., Pellegrino, M. A., Canepari, M., Rossi, R., & Reeggiani, C. (1999). Specific contributions of various muscle fibre types to human muscle performance: an in vitro study. *Journal of electromyography and kinesiology*, *9*, 87-95.
- Bride, J. M., McBride, T., Davie, A., & Newton, R. U. (1999). A comparison of strength and power characteristics between power lifters, Olympic lifters and sprinters. *Journal of strength and conditioning research*, *13*, 58-66.
- Bride, J. M., McBride, T., Davie, A., & Newton, R. U. (2002). The effect of heavy- vs. Light-load jump squat on the development of strength, power, and speed. *Journal of strength and conditioning research*, *16*, 75-82.
- Bruggemann, G. P. (1994). Biomechanics of gymnastic techniques. In V. M. Zatsiorsky (Eds.), *Biomechanics in sport: Performance Enhancement and Injury Prevention* (pp. 79-120). Oxford: Blackwell Science.
- Burke, R. E., Levine, D. N., & Zajac, F. E. (1971). Mammalian motor units: physiological-histochemical correlation in three types in cat gastrocnemius. *Science*, *174*, 709-712.
- Caldwell, G. E. (2004). Muscle modeling. In *Research methods in Biomechanics* (pp. 183 - 209). Champaign: Human Kinetics.
- Caldwell, G. E., Robertson, D. G. E., & Whittlesey, S. N. (2004). Forces and Measurement. In *Research methods in Biomechanics* (pp. 73-102). Champaign: Human Kinetics.
- Cormie, P., McBride, M. J., & McCaulley, O. G. (2007a). Validation of power measurement techniques in dynamics lower body resistance exercises. *Journal of Applied Biomechanics*, *23*, 103-118.
- Cormie, P., McCaulley, O. G., Triplett, T. N., & McBride, M. J. (2007b). Optimal loading for maximal power output during lower-body resistance exercises. *Medicine & Science in sport & Exercise*, *39*, 340-349.
- Cormie, P., Deane, R., & McBride, M. J. (2007c). Methodological concerns for determining power output in the jump squat. *Journal of strength and conditioning research*, *21*, 424-430.
- Cotterman, M. L., Darby, L. A., & Skelly, W. A. (2005). Comparison of muscle force production using the smith machine and free weights for bench press and squat exercises. *Journal of strength and conditioning research*, *19*, 169-176.

- Craig, A. W., & Keen, P. (2001). Isokinetic measurement of maximal muscle power during leg cycling: a comparison of adolescent boys and adult men. *Pediatric exercise science, 13*, 154-166.
- Dapena, J. (2000). The high jump. In V. M. Zatsiorsky (Eds.), *Biomechanics in sport: Performance Enhancement and Injury Prevention* (pp. 284-311). Oxford: Blackwell Science.
- Dern, R. E., Levene, J. M., & Blair, H. A. (1947). Forces exerted at different velocities in human arm movements. *American Journal of physiology, 151*, 415-437.
- Dugan, E., Doyle, T. J. A., Humphries, B., Hasson, C. J., & Newton, R. U. (2004). Determining the optimal load for jump squats: a review of methods and calculations. *Journal of strength and conditioning research, 18*, 668-684.
- Edgerton, R. V., Roy, R. R., Gregor, J. R., & Rugg, S. (1986). Morphological basis of skeletal muscle power output. In N. L. Jones, N. McCartney, & J. McComas (Eds.), *Human Muscle Power* (pp. 43-64). Champaign: Human Kinetics.
- Elliot, B. C., Wilson, G. J., & Kerr, G. K. (1989). A biomechanical analysis of sticking region in the bench press. *Medicine science sports exercise, 21*, 450-462.
- Falvo, J. M., Schiling, K. B., & Weiss, W. L. (2005). Techniques and considerations for determining isoinertial upper-body power. *Sports Biomechanics, 5*, 293-311.
- Faulkner, A. J., Claflin, R. D., & McCully, K. K. (1986). Power output of fast and slow fibers from human skeletal muscles. In N. L. Jones, N. McCartney, & A. J. McComas (Eds.), *Human Muscle Power* (pp. 81-94). Champaign: Human Kinetics.
- Fenn, W. O., & Marsh, B. S. (1935). Muscular force at different speed of shortening. *Journal of Physiology, 85*, 277-297.
- Fleck, S. J., & Kraemer, W. J. (2004). *Designing resistance training programs* (3rd ed.). Champaign, IL: Human Kinetics.
- Froese, E. A., & Houston, M. E. (1985). Torque-velocity characteristics and muscle fiber type in human vastus lateralis. *Journal of applied physiology, 59*, 309-314.
- Gonyea, W. J., Marushia, S. A., & Dixon, J. A. (1981). Morphological organization and contractile properties of the wrist flexor muscles in the cat. *Anatomical Record, 199*, 321-339.
- Green, J. H. (1986). Muscle power: Fiber type recruitment, metabolism and fatigue. In N. L. Jones, N. McCartney, & A. J. McComas (Eds.), *Human Muscle Power* (pp. 65-79). Champaign : Human Kinetics.
- Hall, J. S. (2003). *Basic Biomechanics* (4th ed.). Newark: University of Delaware.

- Hamar, D., & Lipková, J. (2001). *Fyziológia tělesných cvičení* (3th ed.). Bratislava: Univerzita Komenského Bratislava.
- Hamil, J., & Selbie, S. (2004a). Tree-dimensional kinematics. In, *Research methods in Biomechanics* (pp. 145-160). Champaign: Human Kinetics.
- Hamil, J., & Selbie, S. (2004b). Tree-dimensional kinetics. In, *Research methods in Biomechanics* (pp. 145-160). Champaign: Human Kinetics.
- Harrman, E. A., Rosenstein, M. T., Frykman, P. N., & Rosenstein R. M. (1990). The effects of arms and countermovement on vertical jumping. *Med. Sci. Sports Exerc.*, 22, 825-833.
- Harris N. K., Cronin, J. W., & Hopkins, W. G. (2007). Power outputs of a machine squat-jump across a spectrum of loads. *Journal of strength and conditioning research*, 21, 1260-1264.
- Hay, J. G. (1992). Mechanical basis of strength expression. In P.V. Komi (Eds.), *Strength and power in sport* (pp. 197-207). Oxford: Blackwell Scientific Publications.
- Herzog, W., & Haddou, A. R. (2003). Mechanical muscle models and their application to force and power production. In P.V. Komi (Eds.), *Strength and power in sport* (pp. 154-183). Oxford: Blackwell Scientific Publications.
- Hill, A. V. (1922). The maximum work and mechanical efficiency of human muscles, and their most economical speed, *Journal of Physiology*, 56, 19-41.
- Hill, A. V. (1938). The heat of shortening and the dynamic constants of muscle. *Proceedings of the Royal Society, B* 126, 136-195.
- Hill, A. V. (1970). *First and last experiments in muscle mechanics*. London: Cambridge university press.
- Horák, Z., & Krupka, F. (1966). *Fyzika*. Praha: SNTL.
- Hori, N., Newton, U. R., Andrews, A. W., Kawamori, N., McGuigan, R. M., & Nosaka, K. (2007). Comparison of four different methods to measure power output during the hang power clean and the weighted jump squat. *Journal of Strength and Conditioning Research*, 21, 314-320.
- Hori, N., Newton, U. R., Nosaka, K., & McGuigan, R. M. (2006). Comparison of different methods of determining power output in weightlifting exercises. *Strength and Conditioning Journal*, 28, 34-40.
- Houxley, A. F. (1957). Muscle structures and theories of contraction. *Progress in biophysics and biophysical chemistry*, 7, 255-318.

- Izquierdo, M., Aguado, X., Gonzalez, R., López, J. L., & Häkkinen, K. (1999). Maximal and explosive force production capacity and balance performance in men of different ages. *Eur J Appl Physiol* 79, 260–267.
- Izquierdo, M., Ibañez, J., Gorostiaga, E., Garrues, M., Zuacutena, A., Antón, A., Larrión, J. L., & Häkkinen, K. (2002). Maximal strength and power characteristics in isometric and dynamic actions of the upper and lower extremities in middle-aged and older men. *Acta Physiologica Scandinavica*, 167, 57-68.
- Jandačka, D., & Vaverka, F. (2008a). A regression model to determine load for maximal power output. *Sports biomechanics*, 7, 361-371.
- Jandačka, D., & Vaverka, F. (2007). Optimalizace biomechanických parametrů pohybu. In *sborní referátů z interdisciplinární konference: Optimální působení tělesné zátěže a výživy* [CD ROM]. Hradec Králové: Univerzita Hradec Králové.
- Jandačka, D., Vaverka, F., & Gajda, V. (2006). Optimalizace svalového výkonu z hlediska rychlosti pohybu a velikosti zátěže. In D. Zahradník & D. Jandačka (Ed.), *Diagnostika motoriky mládeže* (pp. 47–53). Ostrava: Repronis.
- Jandačka, D., & Vaverka, F. (2008b). Optimalizace zátěže pro maximální svalový výkon. In J. Dovalil & Monika Chalupecka (Eds.), *Současný sportovní trénink* (pp. 101-105). Praha: Olympia-Sportprint.
- Jandačka, D., Vaverka, F., Zahradník, D., & Vala, R. (in press). Srovnání přímé a nepřímé metody měření průměrného výstupního mechanického svalového výkonu. *Česká Kinantropologie*.
- Jandačka, D., & Vaverka, F. (in press). The influence of gender and particular exercises on the optimal load for maximal power output. *Human Biomechanics 2008*. Praha: Karlova Univerzita.
- Janura, M., & Zahálka, F. (2004). *Kinematická analýza pohybu člověka*. Olomouc: Univerzita Palackého v Olomouci.
- Jennings, C. L., Viljoen, W., Durant, J., & Lambert, I. M. (2005). The Reliability of FitroDyne as a Measure of Muscle Power. *Journal of Strength and Conditioning Research*, 19, 859 -863.
- Kamen, G. (2004). Electromyographic kinesiology. In, *Research methods in Biomechanics* (pp. 163-181). Champaign: Human Kinetics.
- Kaneko, M., Fuchimoto, T., Toji, H., & Sueji, K. (1983). Training effect of different loads on the force velocity relationship and mechanical power output in human muscle. *Scandinavia Journal of Medicine Science in Sports*, 5, 50-55.

- Karas, V., & Otáhal, S. (1991). *Základy biomechaniky pohybového aparátu člověka* (1st ed.). Praha: Karolinum.
- Karas, V., Otáhal, S., & Sušanka, P. (1990). *Biomechanika tělesných cvičení* (1st ed.). Praha: SPN.
- Katz, B. (1939). The relation between force and speed in muscle contraction. *Journal of physiology*, 96, 45-64.
- Kawamori, N., Crum, A. J., Blumert, P. A., Kulik, J. R., Childers, J. T., Wood, J. A., Stone, M. H., & Haff, G. G. (2005). Influence of different relative intensities on power output during the hang power clean: identification of the optimal load. *Journal of Strength and Conditioning Research*, 19, 859-863.
- Kilduf, L. P., Bevan, H., Owen, N., Kingsley, M. I. C., Bunce, P., Bennet, M., & Cunningham, D. (2007). Optimal loading for peak power output during the hang power clean in professional rugby players. *International journal of sport physiology and sport performance*, 2, 260-269.
- Knuttgen, H. G., & Komi, P. V. (2003). Basic consideration for exercise. In P.V. Komi (Eds.), *Strength and power in sport* (pp. 3-10). Oxford: Blackwell Scientific Publications.
- Knuttgen, H. G., & Kraemer, J. W. (1987). Terminology and measurement in exercise measurement. *Journal of applied sport science research*, 1, 1-10.
- Kojima, T. (1991). Force-velocity relationship of human elbow flexors in voluntary isotonic contraction under heavy loads. *Internacional journal of sports medicine*, 12, 208-213.
- Komi, P. V. (1986). The stretch-shortening cycle and human power output. In N. L. Jones, N. McCartney, & A. J. McComas (Eds.), *Human Muscle Power*, (pp. 20-34). Champaign: Human Kinetics.
- Komi, P. V. (2003). Strech-shortening cycle. In P.V. Komi (Eds.), *Strength and power in sport* (pp. 184-202). Oxford: Blackwell Scientific Publications.
- Komi, P. V., & Virmavirta, M. (2000). Determinants of successful ski-jumping performance. In V. M. Zatsiorsky (Eds.), *Biomechanics in sport: Performance Enhancement and Injury Prevention* (pp. 349-362). Oxford: Blackwell Science.
- Kraemer, W. J., & Fry, A. C. (1995). Strength testing: Development and evaluation of methodology. In P. Maud & C. Foster (Eds.), *Physiological assessment of human fitness* (pp. 115-138). Champaign : Human Kinetic.
- Kraemer, W. J., & Newton, R. U. (2000). Training for muscular power. *Stientific principles of sport rehabilitation*, 11, 341-368.

- Kraemer, W. J., & Ratamess, N. A. (2003). Endocrine responses and adaptations to strength power training. In P.V. Komi (Eds.), *Strength and power in sport* (pp. 361-386). Oxford: Blackwell Scientific Publications.
- Lanka, J. (2000). Shot putting. In V. M. Zatsiorsky (Eds.), *Biomechanics in sport: Performance Enhancement and Injury Prevention* (pp. 435-457). Oxford: Blackwell Science.
- Lesmes, G. R., Costil, D. L., Coyle, E. F., & Fink, W. J. (1978). Muscle strength and power changes during maximal isokinetics training. *Medicine and science in sport*, 10, 266-269.
- Linnamo, V., Pakarinen, A., Komi, P. V., Kraemer, J. W., & Hakkinen, K. (2005). Acute hormonal responses to submaximal and maximal heavy resistance and explosive exercises in men and women. *Journal of strength and conditioning research*, 19, 566-571.
- Lyttle, A. D., Wilson, G. J., & Ostrowski, K. J. (1996). Enhancing performance: Maximal power versus combined weights and plyometrics training. *J. Strength Cond. Res.* 10, 173-179.
- Mechlová, E., & Košťál, K. (2001). *Výkladový slovní fyziky pro základní vysokoškolský kurz* (1st ed.). Praha: Prometheus.
- Měkota, K., & Blahuš, P. (1983). *Motorické testy v tělesné výchově* (1st ed.). Praha: SPN.
- Mero, A., & Komi, P. V. (1986). Force-, EMG-, and elasticity-velocity relationship at submaximal, maximal a supramaximal running speeds in sprinters. *European Journal of applied Physiology*, 55, 553-561.
- Moritani, T. (2003). Motor unit and motoneurone excitability during explosive movement. In P.V. Komi (Eds.), *Strength and power in sport* (pp. 27-49). Oxford: Blackwell Scientific Publications.
- Newton, R. U., Murphy, A. J., Humphries, B. J., Wilson, G. J., Kraemer, W. J., & Hakkinen, K. (1997). Influence of load and stretch shortening cycle on the kinematics, kinetics and muscle activation that occurs during explosive upper-body movements. *European journal of applied physiology and occupational physiology*, 75, 333-342.
- Newton, R. U., Kraemer, W. J., Hakkinen, K., Humphries, B. J., & Murphy, A. J. (1996). Kinematics, kinetics and muscle activation that occurs during explosive upper-body movements, *Journal of applied biomechanics*, 12, 31-43.
- Perrine, J. J., & Edgerton, V. R. (1978). Muscle force-velocity and power-velocity relationships under isokinetic loading. *Medicin and science in sport*, 10, 159-166.
- Přidalová, J., & Riegerová, J. (2002). *Funkční anatomie I*. Olomouc: Hanex.

- Riegerová, J., & Přidalová, J. (2004). Aplikace fyzické antropologie v tělesné výchově a sportu. Olomouc: Hanex.
- Robertson, G. D. E. (2004). Energy, Work and Power, In, *Research methods in Biomechanics* (pp. 125-144). Champaign: Human Kinetics.
- Runge, M., Rittweger, J., Russo, C. R., Schiessl, H., & Felsenberk, D. (2004). Is muscle power output the key factor in the age-related decline in physical performance? Comparison of muscle cross section, chair rising test and jumping power. *Clin. Physiol. Funct Imaging*, 24, 335-340.
- Sargeant, A. J., Hoinville, E., & Young, A. (1981). Maximum leg force and power output during short-term dynamic exercise. *Journal of applied physiology*, 51, 1175-1182.
- Schickhofer, P. (2000). Silovo-rychlostné schopnosti veslárů a karatistů. *Tělesná výchova a šport*, 10, 19.
- Siegel, J. A., Gilders, R. M., Staron, R. S., & Hagerman, F. C. (2002). Human muscle power output during upper- and lower-body exercises. *Journal of strength and conditioning research*, 16, 173-178.
- Stejskal, P. (2006). Konec tradičního pojetí energetických zón? In K. Hůlka, F. Neuls (Eds.), *Efekty pohybového zatížení v edukačním prostředí tělesné výchovy a sportu: Sborník referátů z 6. mezinárodního vědeckého semináře*. Olomouc: Univerzita Palackého, Fakulta tělesné kultury, Katedra sportů.
- Stone, M. H., O'Bryant, H. S., Williams, F. E., McCoy, L. C., Coglianese, R., Lehmkuhl, M., & Schilling, B. (2003). Power and maximum strength relationship during performance of dynamic and static weighted jumps. *Journal of strength and conditioning research*, 17, 140-147.
- Thomas, G. A., Kraemer, W. J., Spiering, B. A., Volek, J. S., Anderson, J. M., & Maresh, C. M. (2007). Maximal power at different percentages of one repetition maximum: influence of resistance and gender. *Journal of strength and conditioning research*, 21, 336-342.
- Thomas, M., Fiatarone, M.A., & Fielding, R. A. (1996). Leg power in young women: relationship to body composition, strength and and function. *Med. Sci. Sport Exerc*, 28, 1321-1326.
- Thomas, J. R., Nelson, J. K., & Silverman, S. J. (2005). *Research methods in physical activity* (5th ed.). Champaign: Human Kinetics.
- Tidow, G. (1995). Muscular adaptations induced by training and de-training - a review of biopsy studies. *N. Stud. Athletics*, 10, 47-56.

- Toji, H., & Kaneko, M. (2004). Effect of Multiple-Load Training on the Force-Velocity Relationship. *Journal of Strength and Conditioning Research*, 18, 792-795.
- Valenta, J., & kol. (1985). *Biomechanika* (1st ed.). Praha: Academia.
- Van Leeuwen, J. L. (1991). Optimum power output and structural design of sarkomers. *Journal of theoretical biology*. 149, 229-256.
- Vaverka, F., & Gajda, V. (2006). The structure of ground reaction force in vertical counter movement jump of different intensity. In *International Society of Biomechanics in Sports, Proceedings of XXIV International Symposium on Biomechanics in Sports* (pp. 452-455). Salzburg, Austria: University of Salzburg.
- Vdoleček, F., Palenčár, R., & Halaj, M. (2001a). Nejistoty v měření I: vyjadřování nejistot. *Automa*, 7, 50-54.
- Vdoleček, F., Palenčár, R., & Halaj, M. (2001b). Nejistoty v měření II: nejistoty přímých měření. *Automa*, 7, 52-56.
- Vdoleček, F., Palenčár, R., & Halaj, M. (2001c). Nejistoty v měření III: nejistoty nepřímých měření. *Automa*, 7, 28-33.
- Vdoleček, F., Palenčár, R., & Halaj, M. (2002a). Nejistoty v měření IV: nejistoty při kalibraci a ověřování. *Automa*, 4, 41-47.
- Vdoleček, F., Palenčár, R., & Halaj, M. (2002b). Nejistoty měření V: od teorie k praxi. *Automa*, 5, 42-44.
- Weir, J. P. (2005). Quantifying the test-retest reliability using the intraclass correlation coefficient and SEM. *Journal of Strength and Conditioning Research*, 19, 231-240.
- Wilkie, D. R. (1950). The relation between force and velocity in human muscle. *Journal of Physiology*, 110, 249 – 280.
- Williams, A. C., & Keen, P. (2001). Isokinetic measurement of maximal muscle power during leg cycling: A comparison adolescent boys and adult men, *Pediatric Exercise Science*, 13, 154-166.
- Wilson, G., Murphy, A., & Giorgi, A. (1996). Weight and plyometric training: Effects on eccentric and concentric force production. *Can. J. Appl. Physiol.* 21, 301-315.
- Wilson, G., Murphy, A., & Walshe, A. (1997). Performance benefits from weight and plyometric training: Effects of initial strength level. *Coaching Sport Sci. J.* 2, 3-8.
- Wilson, G. J., Newton, R. U., Murphy, A. J., & Humphries, B. J. (1993). The optimal training load for the development dynamic athletic performance. *Medicine & Science in sport & Exercise*, 25, 1279-1286.

- Winchester, J. B., Erickson, T., Blaak, J. B., & McBride, J. M. (2005). Changes in bar-path kinematics and kinetics after power-clean training. *Journal of strength and conditioning research*, 19, 177-183.
- Wit, A., Trzaskoma, Z., Elias, J., Gajewski, J., & Janiak, J. (1993). Peak torque-velocity and power-velocity relationship during the knee joint motion in male and female judoists. *Biology of sport*, 10, 257-266.
- Young, W. (1993). Training for speed-strength: Heavy versus light loads. *NSCA J.* 15, 34-42.
- Zahradník, D., Vaverka, F., Jandačka, D., & Gajda, V. (2006). The weight of projectile and throw distance [Abstract]. In H.Schwameder, G.Strutzenberger, V.Fastenbauer, V.Lindinger & E. Müller (Eds.), *Proceedings of the XXIV International Symposium on Biomechanics in Sports* (p. 511). Salzburg:University of Salzburg.
- Zatsiorsky, V. M. (1974). Studies of motion and motor abilities of sportsmen. In R. C. Nelson & C. A. Morehouse (Eds.), *Biomechanics IV* (pp. 273-275). Baltimore, University Park Press.
- Zatsiorsky, V. M. (2003). Biomechanics of strength and strength training. In P.V. Komi (Eds.), *Strength and power in sport* (pp. 439-487). Oxford: Blackwell Scientific Publications.
- Zatsiorsky, V., & Kraemer, J. W. (2006). *Science and practice of strength training* (2nd ed.). Champaign : Human Kinetic.
- Zehula, K. (1990). *Čidla robotů*. Praha: SNTL.

