



# 11<sup>th</sup> BSSS Conference in Tartu on 25-27 April 2018 Programme





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The Conference is organized by the University of Tartu in cooperation with Baltic Sport Science Society, Active Life Cluster SportEST, Doctoral School of Behavioural, Social and Health Sciences and supported by the University of Tartu ASTRA Project PER ASPERA (European Regional Development Fund).

# Overall Programme of 11<sup>th</sup> BSSS Conference in Tartu on 25-27 April 2018 at Dorpat Conference Centre

25 April 17.00-18.00 18.00-19.00 19.00	BSSS Board Meeting / Peterson Hall Round Table Meeting / Peterson Hall Welcome Reception / Baer Hall
26 April	
8.45-9.20	Registration
9.20-9.40	Opening Address by Priit Kaasik, Head of the Institute of Sport Sciences
DI	and Physiotherapy / Struve Hall
•	n I / Struve Hall
9.45-10.30	Mooses, University of Tartu
9.43-10.30	Iñigo Mujika, University of Basque Country Strength training for endurance performance
10.30-11.15	Marc Lochbaum, Texas Tech University
10.30-11.13	Achievement goals and the sports experience – what we do know and what we need to do
11.15-11.45	Aave Hannus, University of Tartu
	Understanding and misunderstanding single-case research designs
11.45-12.00	Coffee break
12.00-13.00	Scientific Sessions on 4 topics
13.00-14.00	Lunch
14.00-14.30	Poster Presentations
14.30-15.45	Young Scientists' Sessions on 4 topics
15.45-16.00	Coffee break
16.00-17.00	Young Scientists' Sessions continue and/or Scientific Sessions
19.00	Conference Dinner / Struve Hall
27 April	
_	n II / Struve Hall
•	Mäestu, University of Tartu
9.00-9.45	Perikles Simon, Johannes Gutenberg-University of Mainz
	efDNA as upcoming biomarker in sports sciences
9.45-10.15	Aleksandra Čuprika (A. Fernāte, R. Seiler), Latvian Academy of Sport
	Education
	Promotion of physical capital in fitness
10.15-10.45	Tomas Venckūnas, Lithuanian Sports University
	Adaptation to high intensity interval training depending on antioxidant status
10.45-11.00	Coffee break
11.00-12.30	Scientific Sessions on 4 topics
12.30	Closing ceremony / Peterson Hall
13.00	Lunch

#### **Coaching and Performance / Krause Hall**

#### 26 April

Coaching	and	Performance	1
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Chair: Rūtenis Paulauskas, Lithuanian University of Educational Sciences Ando Pehme, University of Tartu

12.00-12.15	Indrek Rannama (K. Pedak, K. Reinpõld), Tallinn University
	Relationships between road cyclists' musculoskeletal state and metabolic
	economy
12.15-12.30	Pierpaolo Sansone (H. Tschan, D. Conte, A. Tessitore), University of Rome
	Foro Italico
	Influence of competitive level and position on training load and perceived
	recovery in female basketball players
12.30-12.45	Diana Krafte (V. Lāriņš, A. Fernāte), Latvian Academy of Sport Education
	The model of special artistry in rhythmic gymnastics
12.45-13.00	Kalvis Ciekurs / Viesturs Krauksts (J. Grants, R. Haljand, R. Matuljevičius),
	Latvian Academy of Sport Education
	Influence of foot belly pressure on anaerobic power in rowers
13.00-14.00	Lunch
14.00-14.30	Posters
	Edgars Getmančuks (A. Čunrika, I. Čunriks). Latvian Academy of Sport

Edgars Ģetmančuks (A. Čuprika, L. Čupriks), Latvian Academy of Sport Education

Kettlebell lifting exercises develop strength endurance in fitness

Renata Kvikliene (R. Kontorovicienė), Lithuanian University of Educational Sciences

Evaluation of volleyball techniques in the initial stage of the volleyball players training

Audronius Vilkas (R. Melinis, A. Lisinskienė), Lithuanian University of Educational Sciences

Do talented boxers athletes have the same performance characteristics as their peer athletes?

Olena Adelmann (L. Čupriks), Latvian Academy of Sport Education Combination of strength and plyometric exercises for development of explosive power in powerlifting

Inga Liepiņa (A. Kaupuzs), Latvian Academy of Sport Education Sport climbers' hand plaster application in bouldering competitions

Kalvis Ciekurs (I. Nikonovs, R. Zangerl, D. Krauksta), Latvian Academy of Sport Education. Parkour and recreational activities

Antra Gulbe (L. Celmina), Latvian Academy of Sport Education

Canoe rower posture asymmetry correction with exercises

Donatas Gražulis, Lithuanian University of Educational Sciences

Performance indicators of Lithuanian national soccer team

Jānis Bullītis (I. Renins), Latvian Academy of Sport Education

The impact of balance development on 9-11-year-old ice hockey players' ice skating skills

# Coaching and Performance - young scientists' session Chair: Mehis Viru, University of Tartu

14.30-14.45	Edgars Bernāns (V. Āboliņš, J. Lanka), Latvian Academy of Sport Education Differences in vertical ground reaction forces during the first attempt of barefoot running
14.45-15.00	Deivydas Velicka (K. Poderienė, Z. Kairiukstienė, J. Poderys), Lithuanian University of Health Science Cardiovascular changes during exercising in easy aerobic mode and under
	influence of differential learning tasks
15.00-15.15	Teet Meerits (T. Oja, M. Pääsuke, H. Gapeyeva), University of Tartu Effect of countermovement jumps on lower limbs performance of basketball substitution players
15.15-15.30	Mārtiņš Čampa (G. Akuratere, S. Rozenstoka), Latvian Academy of Sport Education The effects of mental fatigue on basketball specific physical and technical
	performance
15.30-15.45	Irina Bogdanoviča (V. Lāriņš), Latvian Academy of Sport Education Efficient pattern and technique problems on the initial stage of learning swimming strokes: case study
15.45-16.00	Coffee break

### Coaching and Performance - young scientists' session Chair: Janar Sagim, University of Tartu

16.00-16.15	Agris Peipiņš (A. Fernāte, B. Smila), Latvian Academy of Sport Education The essence of the decision making and its assessment of the orienteering sprint
16.15-16.30	Marina Rjabkova (A. Zuša), Latvian Academy of Sport Education Relationship between balance skills, foot stance and sport result in archery. Pilot study
16.30-16.45	Rasmus Pind (E. Lätt, P. Purge, J. Mäestu), University of Tartu
	Session-RPE method for quantifying and relating training loads to physical performance in adolescent swimmers
16.45-17.00	Igors Siminaitis (L. Čupriks, A. Čuprika), Latvian Academy of Sport
	Education
	Effect from respiratory depression on organism functionality in pre-season training period in triathlon
17.00-17.15	Einārs Pimenovs (A. Pimenovs, A. Fernāte), Latvian Academy of Sport
	Education
	The role of Judo's complex and risk group diverse techniques in the process of
	judo training and competition

# 27 April

# Coaching and Performance 2 Chair: Jaak Jürimäe, University of Tartu

11.00-11.15 11.15-11.30	Daniele Conte (L. Šiupšinskas, R. Kreivyte, H. Paulauskas), Lithuanian Sports University  Monitoring weekly training load and acute: chronic workload ratio changes during the in-season phase in elite women's basketball  Kęstutis Matulaitis (Pakalniškis), Lithuanian Sports University  Effectiveness of the pick and roll offense in top level Lithuanian basketball teams
11.30-11.45 11.45-12.00	Henrikas Paulauskas (R. Kreivytė, L. Šiupšinskas, D. Conte), Lithuanian Sports University Investigating weekly training load, monotony and strain in top and bottom elite women's basketball teams Enrika Baltrimavičiūtė (E. Zaičenkovienė), Lithuanian Sports University The effect of Pilates exercises on the 10-14-year-old aerobic gymnastics athletes hamstrings muscles elasticity and trunk mobility

#### **Pedagogy, Social Aspects and Management in Sport / Parrot Hall**

#### 26 April

Pedagogy, Social Aspects and Management in Sport 1 Chair: Aušra Lisinskienė, Lithuanian University of Educational Sciences Andre Koka, University of Tartu

- 12.00-12.15 Artūras Akelaitis, Lithuanian University of Educational Sciences
  The education of emotional skills among senior high school age students in physical education classes
- 12.15-12.30 Inta Bula-Biteniece / Rasma Jansone, Latvian Academy of Sport Education Outdoor class in preschool
- 12.30-12.45 Aušra Lisinskienė (M. Lochbaum), Lithuanian University of Educational Sciences Developing a C-A-P questionnaire for the measuring of coach-athlete-parent interpersonal relationships in youth sport: A pilot study
- 12.45-13.00 Rimantas Mėlinis (A. Vilkas, A. Lisinskienė), Lithuanian University of Educational Sciences

  The selection of talented adolescent athletes: the experiences of elite youth sport coaches

#### 13.00-14.00 Lunch 14.00-14.30 Posters

Irena Dravniecė (M. Jakovleva, A. Dzenitis), Latvian Academy of Sport Education Integrating content of natural sciences in PE games

Asta Lileikienė (L. Danilevičienė), Lithuanian Sports University

Students' self-perceptions of foreign language anxiety in university learning

Ando Pehme (R. Puhke, P. Kaasik), University of Tartu

Experience of student-athletes' dual career at the University of Tartu

Stanislav Sabaliauskas (R. Šilinskienė), Lithuanian University of Educational Sci.

Psychometric properties of the teacher leadership scale adapted to physical education

Stanislav Sabaliauskas (S. Poteliūnienė, Ustilaitė, J. Česnavičienė, A.

Juškevičienė), Lithuanian University of Educational Sciences

The need of physical education teachers to develop their professional competence Stanislav Sabaliauskas (E. Šileikytė), Lithuanian University of Educational Sciences

Between sport and arts: systematic review of the context in aesthetic sports Agita Ābele (I. Immere, G. Immere), Latvian Academy of Sport Education Sense Development in a Creative Sports Class for Third Grade Students Monta Jakovļeva (B. Luika, S. Rulle), Latvian Academy of Sport Education Provision of the development of children and youth sport in Valmiera Kristina Mejerytė-Narkevičienė, Lithuanian Sports University Benefits of university collaboration with leisure organizations in curriculum development

Vida Ivaskienė (V. Skyriene), Lithuanian Sports University

The distribution of students' values according to their gender and level of physical activity

#### Pedagogy, Social Aspects and Management in Sport - young scientists' session Chair: Kristjan Kais, University of Tartu

14.30-14.45 Henri Tilga (V. Hein, A. Koka), University of Tartu Enhancing students' psychological need satisfaction and intrinsic motivation by increasing physical education teachers' autonomy support
14.45-15.00 Hanna Kalajas (A. Koka, V. Hein, H. Tilga, L. Raudsepp), University of Tartu Using the self-determination theory to explain the objectively measured leisure time physical activity among adolescents
15.00-15.15 Katrina Volgemute (D. Krauksta, Ž. Vazne), Latvian Academy of Sport Education Sport Imagery Ability Questionnaire adaptation to Latvian environment
15.15-15.30 Maria de la Trinidad Morales Belando (D. Conte, J.L. Arias-Estero), Universidad Católica San Antonio de Murcia Differences in type of attack and final action as a function of ball mass in youth basketball
15.45-16.00 Coffee break

## Pedagogy, Social Aspects and Management in Sport 2 Chair: Lennart Raudsepp, University of Tartu

16.00-16.15	Aiga Dombrovska (S. Luika), Latvian Academy of Sport Education
	Preconditions of High performance sport development in Latvia
16.15-16.30	Vita Karvelytė (R. Gruodytė-Račienė), Lithuanian Sports University
	Is physical activity and body mass index of nordic and baltic upper secondary
	schoolchildren and their best classmates related? An international pilot study
16.30-16.45	Ingrida Smuka, Latvian Academy of Sport Education
	The experience of recreation and tourism students from different sports
	Universities of different countries, using Intangible Cultural Heritage (ICH)
16.45-17.00	Signe Luika (J. Grants, I. Kravalis, A. Dombrovska, I. Rudzinska), Latvian
	Academy of Sport Education
	Labor market of sport in Latvia: reality and challenges

#### 27 April

## Pedagogy, Social Aspects and Management in Sport 3 Chair: Vello Hein, University of Tartu

#### Artur Litwiniuk, Josef Pilsudski Academy of Physical Education Warsaw

11.00-11.15	Raimonda Palionytė, Lithuanian Equestrian Federation
	Dual career – what is missing? Education. Lithuanian review
11.15-11.30	Karel Kulbin (E. Amur), Tallinn University
	Short-term event volunteering and subjective well-being
11.30-11.45	Artur Litwiniuk (E. Huk-Wieliczuk, W. Jagiello, W. Blach, J. Grants), Josef
	Pilsudski Academy of Physical Education Warsaw
	Physical activity and personality of students training combat sport
11.45-12.00	Juris Grants (P. Róžański, I. Nikonovs, K. Mirkowicz), Latvian Academy of Sport
	Education. Students' emotional state in skiing education: inductive approach

#### Physiotherapy and Health-Related Issues of Physical Activity / Pirogov Hall

#### 26 April

#### Physiotherapy and Health-Related Issues of Physical Activity 1 Doris Vahtrik, University of Tartu

- 12.00-12.15 Rima Solianik (A. Sujeta, K. Justinavičienė, A. Čekanauskaitė, J. Jocienė), Lithuanian Sports University Effects of 2-day fasting on perceived stress, and cognitive and motor functions in overweight young women
- 12.15-12.30 Saule Sipavičienė (I. Klizienė, J. Pozerienė, K. Vadopalas), Lithuanian Sports University

  Effects of a three months' lumbar-stabilization exercises on multifidus muscles, isokinetic peak torque and pain for women with chronic low back pain
- 12.30-12.45 Onur Oral (N. Oztasan, F. Alakoc), Ege University

  Metabolic and psychological responses of physical activity for a healthy lifestyle among young people.
- 12.45-13.00 Raminta Sakalauskaite (E. Kemerytė-Riaubienė), Lithuanian University of Educational Sciences
  Relationship among maturation and fitness tests indices of girls

#### 13.00-14.00 Lunch 14.00-14.30 Posters

Rasa Mikalonytė (E. Kemerytė-Riaubienė), Lithuanian University of Educational Sciences

The handball players training based on preventive measures

Audronius Vilkas (V. Juškelienė, A. Lisinskienė, R. Melinis), Lithuanian University of Educational Sciences

Attachment to parents and peers as a social determinant of adolescent's health related physical activity

Darius Radžiukynas (N. Žilinskienė, D. Gražulis), Lithuanian University of Educational Sciences

Comparison between the 20–29 and 30–39-year-old women's anthropometric indices

Viesturs Lāriņš (A. Rudzitis, P. Krumina), Latvian Academy of Sport Education A whole body oscillation method influence on functional state of the organism Aivars Kaupuzs (A. Gorbunovs, Z. Timsans), Rezekne Academy of Technologies The validation of prototype of force platform for postural balance analysis Edita Slamasauskaite (V. Juodzbaliene), Lithuanian Sports University The effect of physiotherapy with local vibration of quadriceps femoris on leg function and static balance after anterior cruciate ligament reconstruction Vaida Sidlauskaite (B. Zachariene, A. Stasiulis), Lithuanian Sports University Muscle oxygenation during exercise in physically active and overweight 6-19 years old children

Eglė Kemerytė-Riaubienė (R. Sakalauskaite), Lithuanian University of Educational Sciences

Peculiarities of respiratory system in cyclic and acyclic sports representatives

Vilma Juodžbalienė (S. Eidukevicius, L. Skikas, V. Dudoniene, V. Stalioraitis), Lithuanian Sports University

The effect of physiotherapy and platelet enriched plasma injections on pain and function in achilles tendinopathy

Milda Gintilienė (H. Gapeyeva, J. Ereline, T. Kums, J. Jürimäe, M. Pääsuke), Lithuanian Sports University

Relationship between body composition, inflammatory markers and habitual physical activity in older women

#### Physiotherapy and Health-Related Issues of Physical Activity - young scientists' session Chair: Helena Gapeyeva, University of Tartu

- 14.30-14.45 Margot Bergmann (A. Zahharova, T. Asser, H. Gapeyeva, D. Vahtrik), University of Tartu. Associations between trunk muscles tone and the vital capacity of the lungs in persons with traumatic spinal cord injury and healthy controls
- 14.45-15.00 Iveta Kalnina (L. Zilinskis, I. Zvigule), Latvian Academy of Sport Education Model of consciousness in the process of physical activity
- 15.00-15.15 Inga Dijokienė (M. Brazaitis, N. Eimantas, N. Baranauskiene, M. Cernych, H. Paulaskas), Lithuanian Sports University

  Repetetive short-term cold exposure effect on cognitive function: pilot study
- 15.15-15.30 Alina Kurmeleva, Latvian Academy of Sport Education
  Infant swimming specialist main challenge of parental competence factors in infant
  floating
- 15.30-15.45 Karina Ostrovska (A. Kļaviņa, J. Sokolovska), Latvian Academy of Sport Education
  Free-living physical activity programme and Type 2 diabetes: research proposal

#### 15.45-16.00 Coffee break

#### Physiotherapy and Health-Related Issues of Physical Activity - young scientists' session/ Physiotherapy and Health-Related Issues of Physical Activity 2 Chair: Mati Pääsuke, University of Tartu

- 16.00-16.15 Margarita Černych (A. Šatas, N. Baranauskienė, M. Brazaitis), Lithuanian Sports University.

  Residual sauna effect on cerebral activity and cognitive performance (Y)
- 16.15-16.30 Agris Liepa (U. Gudina, V. Lāriņš, E. De Bruin), Latvian Academy of Sport Education

  The effects of cognition and functional performance on core stability: a cross-sectional study **(Y)**
- 16.30-16.45 Jelena Sokk (H. Gapeyeva, J. Ereline, M. Merila, M. Pääsuke), University of Tartu Associations between shoulder active range of motion, shoulder muscle force and fatigability in patients with frozen shoulder syndrome
- 16.45-17.00 Vilma Dudonienė (R. Obertinca, V. Juodzbaliene, J. Pozeriene), Lithuanian Sports University

  Impact of core stabilization exercises on the balance and core stability of young football players

#### 27 April

#### Physiotherapy and Health 3 Chair: Jelena Sokk, University of Tartu

11.00-11.15 Agnė Čekanauskaitė (R. Solianik, A. Skurvydas), Lithuanian Sports University Effect of a single bout of aerobic exercise on cognitive function and motor learning in elder people 11.15-11.30 Luīze Bebriša-Fedotova (A. S. Brian, L.J. Lieberman, A. Kļaviņa), Latvian Academy of Sport Education SUP Boarding for Children with Visual Impairment During Sport Camp 11.30-11.45 Eva-Maria Riso (S. Vaiksaar, L. Toplaan, J. Jürimäe), University of Tartu Physical activity of children during the transformation from kindergarten to school 11.45-12.00 Andra Fernāte (A. Kļaviņa), Latvian Academy of Sport Education Measurement characteristics of the currently used physical activity questionnaires in Latvia 12.00-12.15 Kristina Poderiene (E. Trinkunas, V. Silinskas, A. Buliuolis, J. Poderys), Lithuanian Sports University Wearable sensors based feedback during exercising for health 12.15-12.30 Triinu Sirge (J. Ereline, T. Kums, H. Gapeyeva, K. Kindsiko, M. Pääsuke), University of Tartu Work ability, musculoskeletal pain and physical activity in university administrative workers

#### **Exercise Physiology / Peterson Hall**

#### 26 April

Exercise	<b>Physiology</b>	1

Chair: Eva-Maria Riso, University of Tartu

12.00-12.15 Aivaras Ratkevičius (P. Minderis, M. Kvedaras, A. Fokin, A. Lionikas), Lithuanian Sports University

Fasting leads to greater weakening of soleus muscle than caloric restriction in mice

12.15-12.30 Ruta Dadelienė (R. Nekriošius, J. Skernevičius), Lithuanian University of Educational Sciences
Changes of aerobic metabolism in kayak rowers during application of different training methods

12.30-12.45 Inese Pontaga (J. Żidens), Latvian Academy of Sport Education Performance estimation of Latvian handball and basketball players from premium league teams

12.45-13.00 Marius Brazaitis (H. Paulauskas, N. Eimantas), Lithuanian Sports University Aging preserves motor performance in hyperthermia

13.00-14.00 Lunch

14.00-14.30 Posters

Kazys Milašius (Y.Y. Yerzhanova, Zh.B. Sabyrbek), Lithuanian University of Educational Sciences

Assessment of condition of rational nutrition of athletes in Kazakhstan

Edgaras Lapinskas (A. Ratkevičius, A. Lionikas), Lithuanian Sports University

The exploration of morphometric characteristics of soleus muscle between C57BL/6J and consomic C57BL/6J-Chr10A/J/NaJ mice. Pilot study

Ando Pehme (M. Aru, Karin Alev L. Õnnik, P. Kaasik, T. Seene), University of Tartu

Changes in myosin heavy chain isoforms of old rats skeletal muscle after high dose dexamethasone administration

Silva Suvi (M. Mooses, S. Timpmann, L. Medijainen, E. Unt, V. Ööpik), University of Tartu

Sodium citrate supplementation after dehydrating exercise may alleviate stress during subsequent 40-km cycling time-trial in the heat

Zinta Galeja (A. Paeglitis), Latvian Academy of Sport Education

Correlative relationships between changes of the neck functional state and respiratory cycle parameters after reflector irritation of neck vertebra

Janis Fiedler (A. Brahmer, E. Neuberger, B. Boztepe, P. Simon), Johannes Gutenberg-University of Mainz

Molecular changes impacted by the diving reflex

#### Exercise Physiology – young scientists' session Chair: Raivo Puhke, University of Tartu

14.30-14.45 Paulius Kamarauskas (R. Paulauskas), Lithuanian University of Educational Sciences

- Muscle oxygenation related to repeated sprint exercises in basketball players
- 14.45-15.00 Mindaugas Kvedaras (A. Ratkevičius), Lithuanian Sports University Fighting against muscle weakness in ageing: examining the effect of calorie restriction
- 15.00-15.15 Lauri Õnnik (S. Suvi, M. Mooses), University of Tartu Prevalence of low BMD of high-level Kenyan male and female distance runners compared to controls
- 15.15-15.30 Raulas Krušnauskas (T. Venckūnas, A. Snieckus, N. Eimantas, N. Baranauskienė, A. Skurvydas, M. Brazaitis, S. Kamandulis), Lithuanian Sports University Effects of very low volume, high-intensity interval exercise in young, old and cyclist men
- 15.30-15.45 Ligita Siline (A. Stasiulis), Lithuanian Sports University
  Relationship between VO2, muscle deoxygenation kinetics and cognitive function in older people

#### 15.45-16.00 Coffee break

#### Exercise Physiology – young scientists' session Chair: Martin Mooses, University of Tartu

- 16.00-16.15 Andrius Šatas (G. Jurgelaitienė, A. Čekanauskaite, A. Skurvydas), Lithuanian Sports University

  The effect of multiple sustained bilateral maximum isometric voluntary contractions on indicators of fatigue and force coordination
- 16.15-16.30 Lauri Savolainen (S. Timpmann, L. Medijainen, E. Lätt, M. Lellsaar, E. Unt, V. Ööpik), University of Tartu
  Is there any relationship between cardiorespiratory fitness and vitamin D status in middle age and elderly men?
- 16.30-16.45 Giedre Jurgėlaitienė (A. Skurvydas, A. Šatas), Lithuanian Sports University
  The relationship between motor function fatigue, stress markers, glucose and lactate
  concentration after physical task of bilateral sustained isometric maximal voluntary
  contraction
- 16.45-17.00 Martin Vahimets (H. Gapeyeva, S. Mutsenik, J. Ereline, M. Pääsuke, P. Kaasik), University of Tartu

  Calf muscles tone characteristics in young basketball players: immediate effect of cold application

#### 27 April

#### Exercise Physiology 2

#### Chair: Vahur Ööpik, University of Tartu

- 11.00-11.15 Mati Pääsuke (J. Ereline, H. Gapeyeva, T. Kums, M. Leht, M. Nigul, M. Eimre, R. Pääsuke, K. Paju), University of Tartu Gender differences in age-related bone remodeling
- 11.15-11.30 Alvis Paeglitis (K. Pogulis), Latvian Academy of Sport Education Trunk muscle endurance and emg characteristics

- 11.30-11.45 Neringa Baranauskienė (N. Eimantas, M. Černych, H. Paulauskas, A. Šatas, M. Brazaitis), Lithuanian Sports University
  Effect of repeated sprint interval cycling exercise on neuromuscular and stress indicators in young women
- 11.45-12.00 Vahur Ööpik (S. Timpmann), University of Tartu Sodium citrate supplementation: physiological and performance aspects