



PEDIATRIC INTENSIVE THERAPY

TRAINING COURSE AGENDA

2006

THERASUIT
UNIVERSAL EXERCISE UNIT
INTENSIVE THERAPY

PRESENTER: IZABELA KOSCIELNY

10:00-10:15	Introduction
10:15-10:30	History of the TheraSuit
10:30-11:00	Indications/benefits Contraindications, Precautions
11:00-1:00	Practice
1:00-2:00	LUNCH BREAK
2:00-5:30	Practice Examples of exercises reducing high tone, promoting trunk control and stabilization
5:30-6:00	Questions, discussion



10:00-1:00 Hands-on practice

1:00-2:00 LUNCH BREAK

2:00-5:30 Hands-on practice

5:30-6:00 Questions, discussion



- 10:00-10:30 Introduction
- 10:30-11:30 Theory:
Principle
Goals
Indications
Contraindications
Precautions
Types of suspension
- 11:30-1:00 Demonstration and Practice
- 1:00-2:00 LUNCH BREAK
- 2:00-5:30 Practice
- 5:30-6:00 Questions



10:00-10:15 Introduction

10:15-1:00 Theory:

- Principle
- Goals
- Indications
- Contraindications
- Precautions
- Rules

Attachment of the cords in relation to:

- Strength/Stabilization
- Balance/coordination
- Functional skills/developmental milestones
- Weight bearing/weight shifting
- Sensory integration
- Correlation between strength, stabilization, balance and coordination

1:00-2:00 LUNCH BREAK

2:00-5:30 Practice
Position of the patient during the exercises
Developmental sequence

5:30-6:00 Questions, discussion



European Approach to intensive pediatric physical therapy

9:00- 12:30 Physiology of exercises

I. Deconditioning

- skeletal system
- cardio-vascular system
- respiratory system
- metabolism
- nervous system
- immune system
- endocrine system
- muscular system

II. Morpho-functional changes in muscular system after exercises

III. Adaptation

Supercompensation

IV. Mobilization of the nervous system

V. Fatigue

VI. Protocol for intensive exercise program

Hot pack

Massage

Universal Exercise Unit

Floor Exercises

TheraSuit

Functional skills

Gait training

Endurance training

VII. Diet/Metabolism

Sources of energy

Carbohydrates

Protein

Fat

VIII. Nutrition

Hypo and Hypervitaminosis

12:30-1:30 LUNCH BREAK

1:30-5:30 Demonstration and Practice

5:30-6:00 Questions, presentation of certificates of training.



REFERENCES

BOOKS

1. Lieber, R.L. 2002. *Skeletal Muscle Structure, Function, & Plasticity. The Physiological Basis of Rehabilitation*. Second Edition, Lippincott Williams & Wilkins.
2. Mooren, F.C., Völker, K. 2005. *Molecular and Cellular Exercise Physiology*. Human Kinetics.
3. Borer, K.T. 2003. *Exercise Endocrinology*. Human Kinetics.
4. LeMura, L.M., Von Duvillard, S.P. 2004. *Clinical Exercise Physiology. Application and Physiological Principles*. Lippincott Williams & Wilkins.
5. Rowland, T.W. 2005. *Children's Exercise Physiology*. Second Edition. Human Kinetics.
6. Wilmore, J.H., Costill, D.L. 1999. *Physiology of Sport and Exercise*. Second Edition. Human Kinetics.
7. Baechle, T.R., Earle, R.W. 2000. *Essential of Strength Training and Conditioning*. Second Edition. Human Kinetics.
8. McArdle, W.D., Katch, F.I., Katch, V.L. 2001. *Exercise Physiology. Energy, Nutrition, and Human Performance*. Fifth Edition. Lippincott Williams & Wilkins.
9. Cerny, F.J., Burton, H.W. 2001. *Exercise Physiology for Health Care Professionals*. Human Kinetics.
10. Bar-Or, O., Rowland, T.W. 2004. *Pediatric Exercise Medicine. From Physiologic Principles to Health Care Application*. Human Kinetics.
11. Durstine, J.L. 2003. *Exercise Management for Persons with Chronic Diseases and Disabilities*. Second Edition. Human Kinetics.
12. Fleck, S.J., Kraemer, W.J., 1997. *Designing Resistance Training Programs*. Second Edition. Human Kinetics.
13. Schmidt, R.A., Lee, T.D. 2005. *Motor Control and Learning. A behavioral Emphasis*. Fourth Edition. Human Kinetics.
14. Bobath, K., 1980. *Neurophysiological Basis for the Treatment of Cerebral Palsy*. Second Edition of CDM 23. Clinics in Developmental Medicine No. 75. Mac Keith Press.
15. Panteliadis, C.P., Strassburg, H. M. 2004. *Principles and Management*. Georg Thieme Verlag.
16. Bompa, T. O. Ph.D. 1999. *Periodization. Theory and Methodology of Training*. Human Kinetics.
17. Lephart, S.M., Fu, F.H. 2004. *Proprioception and Neuromuscular Control in Joint Stability*. Human Kinetics.
18. Finnie, N. R. 2004. *Handling the Young Child with Cerebral Palsy at Home*. Third Edition. Butterworth-Heineman.
19. Developmental Medicine and Child Neurology 2005, 47: 571-576. *Proposed definition and classification of cerebral palsy*. April 2005.
20. MacIntosh, B.R., Gardiner, P.F., McComas, A.J. 2006. *Skeletal Muscles. Form and Function*. Second Edition. Human Kinetics.