



Prifysgol Cymru
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University of Wales
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Trawsnewid Addysg; Trawsnewid Bywydau
Transforming Education; Transforming Lives

Introduction to Fitness and It's importance in Dance

Dr Anna Stevenson

Lecture 4



RECAP LAST WEEK



PRINCIPLES OF TRAINING



NUTRITION

RECAP COMPONENTS OF FITNESS



Goal Setting

Specific

Measurable

Achievable

Realistic

Time-framed

Agree SMART goals
(Short, medium & long term)

Individual Reflection

- Write **one SMART goal** for:
- Short term (this semester)
- Medium term (this academic year)
- Long term (end of degree / professional goal)

Specificity

Adaptability

Progressive Overload

Individuality

Reversibility

Recovery time

Principles of programme design

Apply the
principles of
FIIT:

Frequency
Intensity
Time
Type

Principles of programme design

Consider ACSM guidelines: **CV fitness**

- 150-300 min/week moderate intensity (40% - 59% HRR, or
- 75-150 min/week vigorous intensity (60%-89% HRR)
- Those already physically active (in aerobic activity) require intensities at high end of continuum
- Type – Regular, purposeful exercise involving major muscle groups and is continuous or rhythmical in nature.

Principles of programme design

Consider ACSM guidelines: **Muscular fitness**

- F – 2-3 times a week
- I – 2 to 4 sets of 8-12 reps at 60-70% 1RM. All muscle groups worked. 1-2 sets may be sufficient for novice.
- T – relative to number of exercises and sets
- T – resistance machines/free weights/body weight

Principles of programme design

Consider ACSM guidelines: **Flexibility**

- F – minimum of 2/3 times per week
- I – 2 to 4 reps per muscle group to the end of ROM without discomfort
- T – 10-30s for each static stretch. 6 second contraction followed by 10 to 30 second assisted stretch (PNF)
- T – static, dynamic or PNF stretches

Principles of programme design

Consider the following

- Overload
- Adaptation
- Specificity
- Reversibility
- Progression
- Regression
- Rest and recovery (during and between sessions)

Principles of programme design

Consider the order and relevance of fitness components for each session:

- Warm up
- Flexibility (as part of warm up)
- Balance, motor skills training, proprioception training
- Core stability
- Cardiovascular workout
- Muscular conditioning
- Cool down, including flexibility

Quiz

- Q) What is Resistance Training in basic terms?
- Q) Between us can we remember the 7 Foundational Patterns?
- Q) What does a needs analysis consider?

Quiz Answers

Resistance Training in basic terms is: Moving against load (e.g Bands, Bodyweight, Dumbbells)

Pattern
Squat
Lunge
Hinge
Push
Pull
Rotate
Brace

Needs Analysis
Main Movements
Key Muscles
Fitness Quality/When
Common Injuries

Basic Nutrition

Why nutrition matters for dancers

- Energy for class & rehearsals
- Recovery between sessions
- Concentration & coordination
- Injury prevention

Basic Nutrition for Dance Fitness

Carbohydrates – fuel

- Main energy source for dancers
- Examples: rice, pasta, potatoes, oats, fruit
- Low carb = early fatigue

Protein – repair & strength

- Supports muscle repair
- Examples: eggs, dairy, tofu, chicken, beans
- Especially important after training

Fats – health & hormones

- Essential, not “bad”
- Examples: nuts, seeds, avocado, olive oil

Hydration

- Dehydration can lead to poor performance & concentration
- Aim: pale yellow urine
- **Timing basics**
- Eat **before class** → energy
- Eat **after class** → recovery

Following weeks

- 1) **14/01: Intro to components of fitness**
- 2) **21/01 Cardiovascular fitness & Flexibility**
- 3) **28/01 (In Person): Muscular Fitness/Strength**
- 4) **04/02 (Online): Goal setting, Programme Considerations, Nutrition basics**
- 5) **11/02 (Online drop in) Submit assessment**

Assessment Groups

Presentation Groups:

Group 1

Carys
Kiana
Martha
Ethan

Group 2

David
Matthew
Eva
Sienna

Group 3

Erin
Lillie M
Harrison
Sandy-Sophie

Group 4

Evieanna
Ryan
Lilly S
Mia

Group 5

Isabelle
Jess
Lili W
Rebecca

Assessment

- Group Presentation (8 minutes)
- Outline the importance of fitness and training for dancers.
- Provide an overview of key components of fitness associated with dance and include examples of how dancers could train and develop these. In doing so, show how the principles of training have been considered.
- You can use Power Point (or equivalent) and include referencing and a bibliography.
- Research, evaluation and interpretation should be used. The correct referencing standard should be used throughout.

Reference List

- American College of Sports Medicine (ACSM). (2018). ACSM's Guidelines for Exercise Testing and Prescription (10th ed.). Wolters Kluwer.
- Haff, G. G., & Triplett, N. T. (2015). Essentials of Strength Training and Conditioning (4th ed.). Human Kinetics.
- Wilmore, J. H., & Costill, D. L. (2018). Physiology of Sport and Exercise (7th ed.). Human Kinetics.