

FLIP OR SWIM?



How Gymnastics and Swimming Impact Health and Fitness

By: Diana Kudelko



COMPONENTS OF FITNESS

| Health Related | Skill Related | Physiological |
|------------------------------|----------------------|----------------------|
| Cardio Respiratory Endurance | Agility | Metabolic State |
| Muscular Strength | Balance | Bone Integrity |
| Muscular Endurance | Coordination | |
| Flexibility | Speed | |
| Body Composition | Power | |
| | Reaction Time | |

CARDIO VASCULAR ENDURANCE



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Gymnastics

- Average VO₂ Max
- At most, 30% Aerobic Metabolism Used
- High Metabolic Threshold

Swimming

- High VO₂ Max
- Train aerobically
- Increase volume of left ventricle

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Tally Score



MUSCULAR STRENGTH



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Gymnastics

- Static & Dynamic Strength

Swimming

- Only Isokinetic Strength

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Tally Score



MUSCULAR ENDURANCE



MUSCULAR ENDURANCE

Gymnastics

- Necessary to complete challenging routines

Swimming

- Necessary to sustain a good pace throughout the whole race

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FLEXIBILITY



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Gymnastics

- Greater range of motion than sedentary individuals

Swimming

- Same range of motion as sedentary individuals

FLEXIBILITY

Gymnastics

- Greater range of motion than sedentary individuals

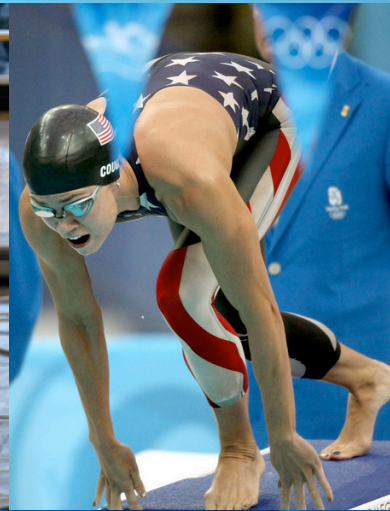
Swimming

- Same range of motion as sedentary individuals

Tally Score



BODY COMPOSITION



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Gymnastics

- Very low body fat percentage

Swimming

- Healthy but average body fat percentage

BODY COMPOSITION

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Tally Score



METABOLIC STATE

Gymnastics

- Decreases total cholesterol, LDL cholesterol, & triglycerides
- Raises HDL cholesterol

Swimming

- Decreases total cholesterol, LDL cholesterol, & triglycerides
- Raises HDL cholesterol

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Tally Score



BONE INTEGRITY

Gymnastics

- May aid in the prevention of osteoporosis

Swimming

- Has no effect on bone density

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Swimming

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Tally Score



SKILLS DEVELOPED

Gymnastics

- Agility
- Balance
- Coordination
- Speed
- Power
- Reaction Time

Swimming

- Coordination
- Speed
- Power
- Reaction Time

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And the Winner is...

GYMNASTICS!



**For more information
Please Visit my Website:**

<http://macaulay.cuny.edu/eportfolios/dkudelko/>