

1) Strength training safety

Faigenbaum, Avery D., and Wayne L. Westcott. "Youth Resistance Training: Updated Position Statement Paper from the National Strength and Conditioning Association." *Journal of Strength and Conditioning Research*, vol. 23, no. 5, 2009, pp. S60–S79.

https://www.researchgate.net/publication/47544225_Effects_of_Resistance_Training_in_Children_and_Adolescents_A_Meta-analysis

This outlines evidence-based recommendations for youth resistance training, like safety guidelines, supervision standards, and principles. I selected this source because my capstone focuses on beginners, many of whom are teenagers entering gym spaces without formal instruction. This article is especially useful because it directly addresses common misconceptions that strength training is unsafe for young people and instead emphasizes proper technique. The credibility of the National Strength and Conditioning Association (NSCA) provides a strong scientific foundation for my video series. One limitation is that the article is highly technical and written for professionals, meaning I will need to translate its findings into clear and accessible language for beginners. Overall, this source ensures that my content aligns with established safety standards.

2) Muscle Growth and Progressive Overload

Schoenfeld, Brad J. "The Mechanisms of Muscle Hypertrophy and Their Application to Resistance Training." *Journal of Strength and Conditioning Research*, vol. 24, no. 10, 2010, pp. 2857–2872.

https://journals.lww.com/nsca-jscr/fulltext/2010/10000/the_mechanisms_of_muscle_hypertrophy_and_their.40.aspx

This article explains the physiological mechanisms behind muscle hypertrophy, including mechanical tension, metabolic stress, and muscle damage. I selected this source because my project teaches beginners why certain training principles like progressive overload are important. The article provides scientific backing for explaining concepts such as increasing weight gradually and structuring workouts effectively. It is useful because it connects practical gym advice to biological processes in the body. However, it is written in dense scientific language and focuses more on theory than on beginner-friendly programming. I will need to simplify and adapt the findings for a general audience. Despite this limitation, it strengthens the credibility of my instructional content and helps ensure that my programming advice is grounded in research rather than gym myths.

3) Muscle Growth and Progressive Overload

Rippetoe, Mark, and Lon Kilgore. *Starting Strength: Basic Barbell Training*. 3rd ed., The Aasgaard Company, 2011.

<https://aasgaardco.com/store/books-posters-dvd/books/starting-strength-basic-barbell-training/>

This book is a widely recognized guide to foundational barbell movements such as the squat, bench press, and deadlift. I selected it because my video series will demonstrate these exact exercises, and I want to ensure proper technical cues and explanations. The book provides extremely detailed breakdowns of form, body positioning, and common mistakes. It is especially helpful for understanding how small changes in posture can prevent injury. One limitation is that the tone can

be opinionated, and some training philosophies may not apply to all beginners. Additionally, it focuses heavily on barbell training rather than broader gym education. Even so, it serves as a strong technical reference for exercise demonstrations in my project.

4) Biomechanics Textbook

McGinnis, Peter M. *Biomechanics of Sport and Exercise*. 3rd ed., Human Kinetics, 2013.

<https://us.humankinetics.com/products/biomechanics-of-sport-and-exercise-3rd-edition>

This textbook explains how forces, joints, and muscle systems interact during physical movement. I chose this source because understanding biomechanics will help me explain why proper lifting form matters rather than simply instructing viewers to copy movements. It allows me to understand joint angles, leverage, and muscle activation in foundational exercises. This is useful for preventing injury and reinforcing safe technique in my videos. The limitation is that it is highly technical and not written specifically for beginners, which means I must interpret and simplify the information. However, using a biomechanics textbook strengthens the scientific accuracy of my project and deepens my understanding of movement beyond surface-level instruction.

5) Physical Activity Guidelines

Centers for Disease Control and Prevention. "How Much Physical Activity Do Adults Need?" CDC, U.S. Department of Health & Human Services.

<https://www.cdc.gov/physicalactivity/basics/adults/index.htm>

This source outlines national physical activity recommendations, including strength training guidelines for adults. I selected it because it provides official public health standards that I can reference in my beginner series. The CDC is a highly credible government organization, which makes this source reliable. It is useful for framing strength training within broader health recommendations rather than presenting it only as aesthetic or performance-based. A limitation is that the guidelines are general and do not provide detailed instruction on exercise form or programming. However, this source supports the health foundation of my capstone and reinforces that strength training is part of overall well-being.

6) Athletic Performance

Thomas, D. Travis, et al. "Position of the Academy of Nutrition and Dietetics: Nutrition and Athletic Performance." *Journal of the Academy of Nutrition and Dietetics*, vol. 116, no. 3, 2016, pp. 501–528.

[https://www.jandonline.org/article/S2212-2672\(15\)01802-X/fulltext](https://www.jandonline.org/article/S2212-2672(15)01802-X/fulltext)

This position paper provides evidence-based recommendations for nutrition and athletic performance, including protein intake, hydration, and recovery. I selected this source because my capstone includes beginner nutrition basics. The article helps clarify common misconceptions about supplements and emphasizes whole-food nutrition and adequate protein intake. It is especially useful because it combines research with practical application. One limitation is that it is written for athletes and sports professionals rather than general gym beginners. Still, it strengthens the scientific credibility of my nutrition advice and ensures I avoid spreading misinformation common on social media.

7) Social Media

Griffiths, Scott, et al. "The Contribution of Social Media to Body Image Concerns and Disordered Eating in Young People." *Current Opinion in Psychology*, vol. 9, 2016, pp. 1–5.

<https://www.sciencedirect.com/science/article/pii/S2352250X15002436>

This article explores how social media influences body image and eating behaviors among young people. I selected this source because beginner lifters are often influenced by unrealistic fitness standards online. This research helps me address the mental health side of gym culture in my video series, encouraging viewers to focus on strength and health rather than comparison. The article is valuable because it connects fitness media to psychological outcomes, which supports my inclusion of confidence and sustainability in training. A limitation is that it focuses broadly on body image rather than gym environments specifically. However, it adds important depth to my project by addressing the emotional and social aspects of fitness.

8) Instructional Fitness Video

ATHLEAN-X. "How to Squat Correctly for Maximum Muscle Growth." YouTube, 2018.

<https://www.youtube.com/watch?v=Dy28eq2Pjcm>

This instructional YouTube video demonstrates proper squat form while explaining common mistakes and injury risks. I selected this source because my capstone also involves demonstrating foundational lifts in video format. Observing how established fitness educators structure explanations, camera angles, and verbal cues helps me analyze what makes instructional fitness content effective. This video is useful because it combines visual demonstration with anatomical explanation, which aligns with my goal of making technique clear and science-based. However, as a YouTube video, it is not peer-reviewed and reflects the perspective of one coach. While the creator is widely respected in the fitness community, I must cross-check technique recommendations with scholarly sources. This resource supports the presentation side of my capstone by helping me understand pacing, clarity, and visual communication in fitness instruction.

9) Video Editing Resource

Premiere Gal. "Beginner's Guide to Video Editing (Adobe Premiere Pro Tutorial)." YouTube, 2021.

<https://www.youtube.com/watch?v=8eDsvKwM40U>

This tutorial provides a step-by-step introduction to video editing in Adobe Premiere Pro, including cutting clips, adding text overlays, adjusting audio, and exporting projects. I selected this source because strong editing will directly affect the clarity and professionalism of my final product. Since my capstone is a video series, understanding pacing, captions, labeling, and clean transitions is essential for making content accessible to beginners. This tutorial is useful because it breaks down editing processes in a beginner-friendly way and focuses on practical skills I will immediately apply. One limitation is that it focuses specifically on Premiere Pro, which

assumes access to that software. Even so, the principles of editing are transferable to other programs. This source supports the presentation component of my capstone.

10) Video-Based Learning

Khan Academy. "How to Make Instructional Videos Effective." YouTube, 2019.

<https://www.youtube.com/watch?v=VtF2AgFSLAw>

This video discusses principles of effective instructional video design, including clarity, pacing, audience engagement, and breaking down complex information into manageable steps. I selected this source because my capstone is not just about fitness knowledge, but about teaching physical skills effectively through media. The video is useful because it highlights strategies such as chunking information, using visual reinforcement, and avoiding cognitive overload. These ideas directly apply to how I will structure my beginner lifting series. A limitation is that the video focuses on academic instruction rather than physical movement demonstration. However, many of the communication principles translate well to fitness education. This source strengthens the teaching and presentation aspects of my project.