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**FNDN 102 Personal Application Assignment / Muscle Fitness Training**

**INTRODUCTION**Resistance training has been shown to improve joint health (Kjaer, 2004)), lean muscle mass (Willis, L.H., et. al. (Wills, et al., 2012), heart health (Umpierre et al., 2007). and brain health (Church et al., 2016), lower blood pressure (Fagard, 2006), reduce low back pain, arthritis, fibromyalgia and reverse specific aging factors in skeletal muscle (Westcott, 2012). It has also been shown to improve bone health (Guadalupe-Grau et al., 2009), reduce risk of fractures (Russo, 2009) and prevent osteoporosis and sarcopenia (Winett, et al., 2001). Resistance training can increase metabolism, reduce body fat, improve blood lipid profiles, glucose tolerance, insulin sensitivity gastrointestinal transit time, which reduce your risk of diabetes, heart disease, and cancer. ((Winett, et al., 2001; Pratley et al., 1994; Kraemer et al., 2002). It can improve performance and daily functional ability by improving strength, power, endurance and flexibility ((Kraemer et al., 2002; Simão et al., 2011). From a mental health perspective, resistance training can help reduce your risk of anxiety and depression and help improve your self-control (Oftedal et al., 2019; Xiang et al., 2019).

**PART 1 | Participate & Record**

Participate in and record your resistance training practice for a minimum of two days in one week. Research shows that you can achieve many of the health benefits of resistance training with as little as twice a week for 15-20 minutes (Winett et al., 2001). However, depending on your goals and your fitness levels, you may get better results with 3x per week for 30-60 minutes. Avoid just doing push-ups and sit-ups. Whether you choose to train all your major muscle groups in one session or focus on a specific area of your body, try to hit all the major movements (i.e. squat, hinge, push & pull) at least once during the week (see the resistance training class notes for more details). For general fitness levels (especially for beginners), doing 1 set of each exercise may be enough. However, research shows that multiple sets are superior for goals such as strength & hypertrophy (Radaelli et al., 2015). Your resistance training sessions can be done at the TWU fitness centre, your local fitness centre or at your home/dorm. You can choose from the following types of resistance training:

Record your weekly resistance exercise on the log on the following page. Your log should include: dates, names of exercises performed, sets, reps and weight. Note: if you are doing a body weight exercise, you can leave the weight blank (unless you are adding additional weight to your body or getting machine or band assistance).

* Barbells
* Cables
* Weight machines
* Body weight exercises
* Dumbbells
* Kettlebells

**PART 2 | Reflect on your week of resistance training**

After completing your resistance training sessions, please use the template provided for you on Moodle to answer the following questions. Print of this entire template and submit it before the start of class on the due date provided for you in the course syllabus.

1. Please explain why you chose the exercises, schedules and facilities of resistance training that you did (e.g. whole body vs. split, number of sets, exercises, etc.)
2. Reflect on how your resistance training practice impacted your quality of life. Did you experience any physical/mental/spiritual benefits? Can you be specific?
3. Would you continue, alter, or discontinue this resistance training practice, and why/why not?

**FNDN 102 Muscle Exercise Week Log**

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| **Day 1 Date:** | Set 1 | Set 2 | Set 3 | Set 4 | Set 5 |
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| **Day 2 Date:** | Set 1 | Set 2 | Set 3 | Set 4 | Set 5 |
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| **Day 3 Date:** | Set 1 | Set 2 | Set 3 | Set 4 | Set 5 |
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**Muscular Fitness marking rubric (50)**

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| **ACTIVITY LOG** |  | **Value -10** | **MARK- 10** |
| Log completed (10) | All required components included, for e.g. List all exercises with wts (or bands or callisthenic), reps and sets, minimum 2x per week for 15-20 minutes. Includes at least one: squat, hinge, push & pull exercise.  | 10 | 10 |
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|  |  Sub-total | **10** | 10 |
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| **REFLECTION QUESTIONS** |  | **Value -35** | **MARK- 35** |
| Questions answered | (3 x 1 pt each) | 3 | 3 |
| Length (full page) | 1 – less than half / 1.5 – three quarters / 2 - complete | 2 | 2 |
| 1. Degree of engagement | 5 – Basic response (little to no detail) / 7.5 – Adequate detail / 10 – Detailed, precise | 10 | 10 |
| 2. Degree of engagement | 5 – Basic response, undeveloped / 7.5 – Adequate detail, thoughtful / 10 – Detailed, thoughtful, articulate | 10 | 10 |
| 3. Degree of engagement | 5 – Basic response, undeveloped / 7.5 – Adequate detail, thoughtful / 10 – Detailed, thoughtful, articulate | 10 | 10 |
|  |  Sub-total | **35** | **35** |
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| **PROFESSIONALISM / FORMATTING** |  | **Value- 5** | **MARK-5** |
| Title Page | 0 – not included / 1 – not APA complete / 2 – APA complete | 2 | 2 |
| Grammar / Formatting | 1 = 4+ errors / 2 = 2-3 errors / 3 = no errors | 3 | 3 |
|  |  Sub-total | **5** | **5** |
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|  |  Total | **50** | **50** |
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| **COMMENTS** |  |  |  |