

ARNIS Sport: CVRAA In-Season Athletes Training Program

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Abstract- Physical inactivity is harmful, and it wreaks havoc on one's health. Several studies have found that martial arts practice promotes a healthy lifestyle, discipline, self-confidence, and overall well-being. The study looked into the significance of Arnis as a martial art and national sport under Republic Act 9850. Arnis has not been identified only as a form of self-defense but a sport that has been governed by the rules of the World Eskrima Kali Arnis Federation and Arnis Philippines. However, The study focused on the International Rules for Sports Arnis, as the Arnis Pederasyong Internasyonal, Inc. (i-ARNIS) prepared Rules and Regulations of Competitive Arnis to conduct all arnis competitions at the local, national, and international levels as recognized by the Department of Education. As a result, teachers' participation as coaches and trainers is valued. The preparation of a well-crafted training program provides systematic conduct of the Arnis sport training for muscular strength, cardiovascular endurance, speed, and co-ordination skills. Coaches and trainers can use training programs to select appropriate training routines to test the students' ability to learn, practice, master, functionalize, and maintain the skills required to win the game. However, training without proper nutrition is not possible. In addition, a well-balanced diet combined with effective training and coaching will be a winning combination that will help the athlete gain strength and stamina, resulting in improved performance. Coaches and trainers could use the program contained in this study to create their customized training program.

Indexed Terms- arnis, anyo, full-contact, martial art, sports,

I. INTRODUCTION

Physical activity such as martial art is a way of life for many people (Benesch 2016). According to Meek

(2018), physical activity can help reduce anxiety. Martial arts training is viewed as a unique way of improving the person's capabilities and skills as a sport, a hobby, an artistic expression, as a regimen for physical, mental, and emotional well-being, or as a way of self-preservation. In the Philippines, Arnis is known as the national sport and martial art by virtue of the Republic Act 9850 (Yap 2017). Identified as *eskrima* during the Spanish era and *Kali* in other Asian countries, Arnis is a weapon-based fighting style in which blunt hand extensions such as rattan sticks, swords, and other similar materials are used. Arnis includes techniques for hand-to-hand combat, joint locks, grappling, and weapon disarming. It is also regarded as one of the most effective self-defense martial arts. Its inclusion in the educational curriculum piqued students' interest to train and participate in the local, national, and international Arnis competitions.

II. THE NATURE OF ARNIS SPORT

The WEKAF (World Eskrima Kali Arnis Federation) is a well-known system in international competitions which was established in 1989. The players usually wear padded body armor and headgear. Both participants use live arnis sticks to earn points. Hitting below the opponent's thigh is illegal and will not merit any score. Based on the "Four-Second Rule" implemented in WEKAF; no points are awarded if the same strike is repeated more than twice in succession. On violating any rule, the officials warn the participants and can be disqualified if they continue violating the format despite two warnings. (*WEKAF International*)



Figure 1. WEKAF protective equipment typically consists of a set of head and body protectors, arm guards, and hand gloves capable of withstanding hits from live sticks during sparring.

Arnis Philippines (ARPI) system was established in 1986. And most prominently used during the 2005 Southeast Asian Games. In this system, participants fight with a lightly padded stick that tends to flex on hard impact. Headgears can be used for protection, and hitting in the back of the head is strictly prohibited as the headgear is open from behind. The fights are observed by judges stationed at various positions to follow if the matches are going fair. The loudness of the impact determines the strike strength. Thrusts to the body help to gain points but are harder to perform. Punches, kicks, and throws are prohibited, along with sticks' direct hit on the face. Disarms must be performed clearly and quickly. The Arnis Pederasyong Internasyonal, Inc. (i-ARNIS) Rules and Regulations of Competitive Arnis are currently used in the conduct of all Arnis competitions at the local, national, and international levels. Arnis Philippines, Inc. developed the Rules and Regulations of Competitive Arnis after extensive consultations with numerous Arnis martial arts authorities. The rules have been carefully crafted to ensure that they conform to and approximate the actual Arnis martial arts in Full Contact and Anyo events while prioritizing the athlete's safety as recognized by the Department of Education.



Figure 2. Red and Blue protective equipment consists of the head and body protectors, upper and lower arm guards, leg and shin guards, groin guards, and gloves intended for padded stick blows.

III. BENEFITS OF ARNIS

Martial arts training has an advantage on physical, mental, and emotional well-being (Wilkinson 1996). Consistent training not only conditions the mind and body to have the strength and stamina to fight back in a violent situation, but it also aids the body in fighting disease and remaining flexible, strong, and active as people age. Martial arts offers stress relief and outlets for pent-up energy. Furthermore, martial arts principles, philosophy, and techniques have been successfully applied in a clinical setting to improve the physical well-being of physically challenged individuals and modify the attitudes, emotions, and behavior of troubled adults and teenagers (Cox 1993). According to Origua et al. (2018), martial arts or any regular physical activity seem to have the potential to improve balance and cognitive functions that decline with age, which can lead to poorer health outcomes. When combined with a healthy diet, it provides people with a well-rounded regimen. People take charge of their health by being conscious of the changing situations they believe may impact them (Bendíková, 2014). According to the study of Burke et al. (2007), the therapeutic value of martial arts is increasingly being realized.

Arnis, as a form of martial, teaches self-control and discipline. Arnis training works out the entire body. It aids in the enhancement of stamina, muscle tone, flexibility, balance, and strength. It promotes a healthy way of life. It helps to improve cardiovascular health

because it stimulates the heart. The exercises involve in Arnis allow one to be in good shape and mood. It can help improve physical fitness, mental and emotional health (Bendíková 2014). Fear and a lack of knowledge and skill play a significant role in low self-esteem (Routledge 2012). Martial arts training allows students to learn and apply skills that would help them realize what they can do and provide them with a sense of accomplishment. According to Barrogo, Garcia, and Lumba (2014), motivational strategies for students to keep going include offering incentives and sharing inspiring success stories of successful, well-known athletes, among others. As students advance through the levels, challenges are met with less understanding and more determination to persevere and succeed. Students learn and practice risk avoidance and combat skills that they can use if their safety is jeopardized. In addition, the majority of people who sign up for martial arts training do so for personal safety. Violence is a reality that everyone must deal with, and martial art training provides the necessary skills to increase one's chances of survival, particularly among females.

IV. NUTRITION AND DIET

Nutrition can help athletes attain optimum performance. The best way to stay healthy is to maintain an active lifestyle and exercise routine, and eat well. According to Cotugna, Vickery, and McBee (2005), proper nutrition for young athletes is critical to growth, development, overall health, and success. In the athletic lifestyle, training and nutrition are crucial. Brotherhood (1984) explained that an athlete might expend up to 30% of their total 24-hour energy output during one hour of intense training. These high-power outputs have severe implications for the energy substrate and water. Carbohydrates are needed to provide energy during exercise. Carbohydrates are stored mostly in the muscles and liver. Complex carbohydrates are found in pasta, corn, sweet potatoes, whole-grain bread, and rice that provide energy, fiber, vitamins, and minerals. Simple sugars, such as soft drinks, jams and jellies, and candy, provide many calories, but they do not provide vitamins, minerals, and other nutrients. Carbonated and sweetened drinks are not advisable for Arnis players as these beverages impede performance. Athletes who exercise or train for more than 90 minutes should eat or drink more carbohydrates, possibly with protein, 2

hours later. A sports bar, trail mix with nuts, or yogurt and granola are sufficient. Burke et al. (2011) revealed that the recovery of muscle and liver glycogen is a fundamental goal of recovery between training sessions or competitive events, primarily when the athlete performs multiple workouts in a short period. Furthermore, protein is necessary for muscle growth and tissue repair.

Protein can also be used for energy by the body, but only after depleting carbohydrate stores. However, it is also a myth that consuming a high-protein diet will promote muscle growth. Strength training and exercise are the only ways to change muscle bulk. Bodybuilders, for example, only need a small amount of extra protein to support muscle growth. Increased total calorie intake is an easy way for athletes to meet this increased demand (Rosenbloom 2017).

Water is an essential nutrient for athletes. Water and fluids are required to keep the body hydrated and at a constant temperature. During an hour of vigorous exercise, your body can sweat several liters. Coaches can assist athletes by emphasizing hydration and incorporating it into the training regimen (Sun et al. 2008). Clear urine is a good sign that the body has fully rehydrated. Athletes are recommended to drink enough fluids with every meal, at least eight glasses of water daily or more even if not thirsty to maintain proper hydration. According to Shirreffs (2009), there is clear evidence that water intake during exercise can improve performance, as long as the set of exercises is enough for the drink to be emptied from the stomach and absorbed in the intestine. Drinking plain water is preferable, but a properly formulated carbohydrate and electrolyte 'sports' drink can improve exercise performance. George (2014) advised that caffeine, sweets and fat-containing products should be avoided because they cause excessive urine production, leading to dehydration.

Deep-fried foods, gravies, dry fruits, and dairy products should also be avoided because they can deplete the energy and activity level of athletes. However, in the study of Shirreffs, Watson, & Maughan (2007), low-fat milk, alone and with an additional 20 mmol/L NaCl, was compared to a sports drink and water to restore fluid balance after exercise-induced hypohydration. The current study's findings

suggest that milk can be an effective post-exercise rehydration drink and should be considered for use after exercise by everyone except those with lactose intolerance.

V. RECOMMENDED DIETARY ALLOWANCE (RDA)

A registered dietician should work with young athletes who are trying to lose weight. Experimenting with diets can lead to poor eating habits with insufficient or excessive nutrient intake. A well-balanced diet is essential for peak performance. As suggested by George (2014), the nutritional needs of athletes are greater than those of non-athletes. The RDA for athletes is as follows. Energy 3000-5000 kcal, Protein 60-90g, Fat 80-150g Calcium 600-800mg, Iron 20-30mg, Vitamin A 750-1000mcg, Thiamine (B1) 2-3mg, Riboflavin (B2) 2-3.2mg, Niacin (B3) 26-36mg, and Ascorbic acid (Vit C) 50-80mg. However, exceeding the recommended dietary allowance (RDA) for any nutrient is harmful and dangerous. Arnis players must follow the weight requirement. Those who are overweight or underweight are not permitted to compete both in full-contact and *anyo* events. Therefore, trainers and coaches must be aware of weight monitoring and management for their athletes, as it is critical in Arnis sport.

DIVISION	WEIGHT (IN KG)	
	BOYS	GIRLS
1Pin weight	43-47	37-40
2Bantam weight	+47-51	+40-44
3Feather weight	+51-55	+44-48
4Extra light weight	+55-60	+48-52
5Half-light weight	+60-65	+52-56

Table 1. Boys and Girls Weight Division (13-17 years old) Palarong Pambansa 2017 Arnis Guidelines and Rules

VI. SCOPE OF TRAINING PROGRAM

The goal of a sports training program is to maximize individual or team efficiency in a specific sport discipline through the use of carefully selected routines and exercises to develop muscular strength, cardiovascular endurance, speed, and co-ordination skills. Sports training focuses on improving motor abilities specific to a sport discipline. Assumed performance is determined by motor ability and motor skill, closely related to the Arnis sport.

Arnis sport training method is usually conducted through mass instruction in which the instructor demonstrates the fundamental skills and techniques to the students, and then it is practiced in parts repeatedly. The purpose of this training program aligns with the five stages of arnis skill development, as suggested by Godhania (2012).

- Learning: the acquisition of basic skills and techniques.
- Practicing: repetition of the basic skills and technique integrating into muscle memory.
- Mastering: performing basic skills and techniques with the correctness of form and effectiveness.
- Functionalizing: use of skills and techniques with speed, power, and resistance.
- Maintaining: perform the skills and techniques through constant correct practice and application

The arnis sports training program is outlined below. It reflects the athletes' in-season training activities in preparation for the CVRAA Meet (Central Visayas Regional Athletic Association). Bais, Bayawan, Bogo, Canlaon, Carcar, Cebu City, Danao, Dumaguete, Guihulngan, Lapu-Lapu, Mandaue, Naga, Tagbilaran, Talisay Tanjay, and Toledo are among the cities that make up Region 7. The training program is designed for a 2-hour intense workout that will begin with different weekly routines immediately after the CNDAA (City of Naga Division Athletic Association). A list of exercises is shown below:

ARNIS SPORT TRAINING PROGRAM

NAGA NHS ARNIS TEAM

DURATION	TIME ALLOTMENT	MONDAY	TUESDAY
Week 1	10 minutes	Dynamic warm-up	Dynamic warm-up
	25 minutes	Resistance training	Road run
		5-minute water break	
	45 minutes	Work out & Shadow drill	Bagging
		5-minute water break	
	30 minutes	<i>Anyo</i> Cooling down	Sparring Cooling down
Week 2	10 minutes	Dynamic warm-up	Dynamic warm-up
	25 minutes	Footwork training	Road run
		5-minute water break	
	45 minutes	Work out & Defensive training	Defensive Pad work
		5-minute water break	
	30 minutes	Sparring Cooling down	<i>Anyo</i> Cooling down
Week 3	30 minutes	Sparring Cooling down	<i>Anyo</i> Cooling down
	10 minutes	Dynamic warm-up	Dynamic warm-up
	25 minutes	Footwork training	Road run
		5-minute water break	
	45 minutes	Work out & Defensive training	Defensive Pad work
		5-minute water break	
	30 minutes	Sparring Cooling down	<i>Anyo</i> Cooling down

DURATION	TIME ALLOTMENT	WEDNESDAY	THURSDAY
Week 1	10 minutes	Dynamic warm-up	Dynamic warm-up
	25 minutes	Footwork training	Road run
		5-minute water break	
	45 minutes	Work out & Shadow drill	Bagging
		5-minute water break	
	30 minutes	<i>Anyo</i> Cooling down	Sparring Cooling down
Week 2	10 minutes	Dynamic warm-up	Dynamic warm-up
	25 minutes	Resistance training	Road run
		5-minute water break	
	45 minutes	Work out & Defensive training	Defensive Pad work
		5-minute water break	
	30 minutes	Sparring Cooling down	<i>Anyo</i> Cooling down
Week 3	10 minutes	Dynamic warm-up	Dynamic warm-up
	25 minutes	Resistance training	Road run

DURATION	TIME ALLOTMENT	FRIDAY	SATURDAY	SUNDAY
		5-minute water break		
	45 minutes	Work out & Defensive training	Defensive Pad work	
		5-minute water break		
	30 minutes	Sparring Cooling down	<i>Anyo</i> Cooling down	
Week 1	10 minutes 25 minutes	Dynamic warm-up Resistance training		
		5-minute water break		
	45 minutes	Work out & Shadow drill	Sparring and <i>Anyo</i>	Rest day
		5-minute water break		
	30 minutes	<i>Anyo</i> Cooling down		
Week 2	10 minutes 25 minutes	Dynamic warm-up Footwork training		
		5-minute water break		
	45 minutes	Work out & Defensive training	Sparring and <i>Anyo</i>	Rest day
		5-minute water break		
	30 minutes	Sparring Cooling down		
Week 3	10 minutes 25 minutes	Dynamic warm-up Footwork training		
		5-minute water break		
	45 minutes	Work out & Defensive training	Sparring and <i>Anyo</i>	Rest day
		5-minute water break		
	30 minutes	Sparring Cooling down		

- a. The actual execution of offensive strikes and proper footwork on a hitting material, usually an old used tire, is known as bagging or hitting. This routine improves agility, power, gripping techniques, and endurance, which are essential in competition.
- b. *Anyo* (form) in Arnis, is a detailed choreographed pattern of martial arts movements designed to be practiced alone. Regular practice of *anyo* is essential because it develops proper body mechanics, helps build muscle memory, develops mindfulness, and promotes proper breathing execution, but its purpose is the core of arnis combat. Arnis *anyo* event is an artistic

demonstration of choreographed sets of offensive and defensive movements, using the stick, wooden replica of a bladed weapon, or metallic non-bladed replica of a weapon.

- c. “Moving while stretching” or stretching through a full range of motion and preparing muscles for more intense exercise is what dynamic warm-up is all about. A dynamic warm-up increases blood flow, aids in the prevention of injury and muscle soreness, and improves overall performance. It may include:
- Jogging
 - Body movement
 - Stretching

- d. Resistance training is defined as any exercise that causes the muscles to contract against an external resistance to increase strength, power, and endurance. It may include:
- Circuit drill
 - Muscular endurance
 - Cardio-vascular endurance
- e. Work out & Shadow drill is the strict execution of proper footwork and offensive airstrikes while using live arnis sticks as if there is an opponent. It is used mainly in Arnis to warm up the muscles before engaging in more strenuous physical activity. It may include:
- Control Striking with a partner
 - Hitting body points
- f. Work out & Defensive training/Pad work is typically performed with a partner who executes all possible offensive strikes that must be blocked or parried by the other with counter strikes. This routine teaches athletes how to score by counter-attacking. It is the heart of the training program, where all skills are used through intensified combining routines. It may include:
- Control Striking with a partner
 - Defense and Counterstriking Hitting body points

- g. Sparring is performed by two people wearing full armor and using padded sticks, with judges and referees. All officiating rules, calls, and scoring are followed in each match, just like in the actual full-contact event. Sparring teaches athletes how to use offensive and defensive techniques to score and win games.
- h. Footwork training is solely intended for agility, speed, and balance. It may include:
- Ladder stepping/skipping
- i. Cooling down is usually the continuation of the workout session but at a slower pace and reduced intensity. It may include:
- Light jogging or walking
 - Stretching

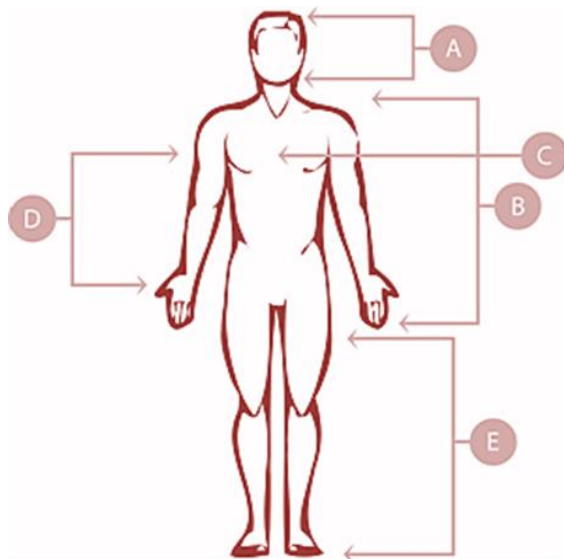


Figure 3. International Rules for Sports Arnis (Updated 2015) I-Arnis Body Points. A. Head and Neck B. Arms and collars including hands C. Torso (from the chest down to waist) D. Armpit to thigh E. Full length of the leg including feet



Figure 4. Naga National High School Arnis Team

CONCLUSION

Numerous studies show that martial arts promote physical development, self-confidence, and overall well-being. The inclusion of Arnis in the school curriculum provides students with the knowledge and better understanding of Arnis as the national sport under Republic Act 9850 and a springboard to several avenues of self-fulfillment to compete in various local and international leagues. Arnis sport is an intensive discipline that requires the close attention of the coaches and trainers, particularly in developing a one-of-a-kind training program that can assist students in developing their potential skills and character through sports. A training program is an essential blueprint because it simplifies routines that have been carefully selected based on the five stages of

development. It guides the trainers through the sequence and flow of exercises in each training session, maximizing time. The program presented in this report results from experience, observation, realization, and knowledge gained from various seminars and training. Furthermore, a well-balanced diet combined with adequate training and coaching will be a winning combination that will help the athlete gain strength and stamina. Thus, systematized diet modification with continuous monitoring of deficiencies by a sports dietician, in conjunction with a good training program and practical nutrition education, can undoubtedly improve performance.

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APPENDIX

Code of Ethics

<http://www.arnisphilippines.com>

Arnis is an event that aims to bond and develop friendship and brotherhood.

It is never a sport to hurt and defeat the opponent but to improve the skills of the players.

It aims to develop the mind, the physique, and the character of the player.

Arnis is played to develop the social aspect that will lead to the close bonding of all practitioners.

All the practitioners respect each other. They salute each other when they meet and from a meeting before they depart. The juniors must salute first and maintain the position until the seniors answer their salute.

The juniors do not have the right to challenge the seniors unless in the program set by their association to fulfill an objective.

All the practitioners continue to move on as there is room for improvement or advancement.

Each practitioner must share with other beginners or practitioners the advancement attained.

Practitioners must desire to strengthen the Arnis family he belongs to by sharing love, knowledge and understanding.

Practitioners must remember that Arnis is not a means to fight people but to bond with them for life improvement.

PUGAY, PO!