

HAVE A PLAN FOR HYDRATION, MEALS/SNACKS, & REST. FUEL THE MACHINE- DON'T TRAIN WELL AND THEN BLOW IT WITH A LOUSY DIET AND LACK OF SLEEP.

“More Physical Readiness Training (PRT) does not equal better PRT. Training quality is more important than the number of repetitions performed.”

William R. Rieger, National Strength and Conditioning Association

References: TC 3-22.20, RAW PT v 3.0

<http://www.acsm.org/>

<http://www.mypyramid.gov/>

<http://www.nasca-lift.org/>

<http://www.cdc.gov/physicalactivity>

How many calories do you need each day?

Each person’s caloric (energy) needs are a little different. Find your estimated needs by visiting <http://www.mypyramid.gov/mypyramid/index.aspx>

Enter your age, gender, height, weight, and level of physical activity to find out your energy and nutrient needs.



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GENERAL FITNESS AND NUTRITION GUIDE 2011

Texas A&M University Army ROTC



“The quality of the unit is determined by the overall picture of physical condition and total military fitness of all its members. It is more important that all Soldiers in a unit receive the benefits of a balanced and well-directed program of physical training than that a few members achieve record performances. The physical training program, therefore, is directed toward the total conditioning of all Soldiers.”

FM 21-20, Physical Training (1946)

If we train muscles we will forget movements; if we train movement we will not forget muscles.

Author Unknown



Cadets– This is a short brochure to help guide you along your path to better overall fitness and nutrition.

We have divided this brochure into a timeline for a single day– from wake up to going to bed. Please reference the links at the end of the brochure for more detailed information.

Let’s refresh our memory on some familiar terms.

Anaerobic- (w/o Oxygen) high-intensity activity of short duration (Sprints -30:60’s, 60:120’s)

Aerobic- (w/ Oxygen) Low to medium intensity over a long duration (running, swimming)

Anaerobic training has a crossover value in improvement of aerobic capability. However, aerobic training alone does little to improve anaerobic capacity.

Why is this important? A 2-mile run is 60% Aerobic, 40% Anaerobic. If you don't train your anaerobic system you are not reaching your full potential.

Core Muscles- These include your entire torso– chest, hips & abs. The Core is a part of all movement and exercise. A strong core is key to physical improvement and success.

TIMELINE

0500 – Wake Up



- Drink 8oz water, fill up water bottle for Physical Training (PT).
- Eat a carbohydrate rich snack and include small amounts of protein. Your body has been fasting all night. You will achieve better performance at PT if your body has some fuel to get it going and keep it going during PT. Try eating some bread and peanut butter or yogurt and granola for a quick snack!

0530 – PT Formation

We use the term Movement Preparation instead of warm up for PT...why? If we just need to warm up, we could wear a jacket or sit in a sauna. Movement Preparation does the following;

- Raises body temperature for exercise
- Loosens joints and muscles
- Primes nerve to muscle messages (tells the body it is about to work, jump, run, etc.)

We should limit static stretching during our movement preparation. You do more damage to your muscles by holding a stretch when they are cold.

MYTH: You can eat whatever you want as long as you are exercising.

The truth: Being physically active makes it even more important for you to fuel your body with the proper nutrients it requires. Would you fuel a Lamborghini with cola? **NO! Don’t fuel your body with it!**

0540 – Physical Training

We have now primed our muscles – its time to get busy with some PT! As a general rule of thumb, you should strive for a minimum of 30 minutes of vigorous exercise, which raises your heart rate to 75-85% of your max heart rate (MHR).

MHR = 220 – AGE (220–20 = 200 beats per minute)
X .85= 170bpm

- Drink 8-12oz of water every 20min, especially in humid areas. This is very important in keeping the body cool and ensuring peak performance throughout the duration of your training session.
- If working out longer than 1hr, consume a sports drink such as Gatorade or Powerade. Soda and energy drinks are not recommended for fluid replacement during physical activity.
- This can't be said enough- **Form matters**– quality over quantity wins every time! It is better to do 15 perfectly executed pushups than doing 30 okay pushups. Don't let the number of reps get stuck in your brain – Do as many as you can with good form!

What does a week of Army ROTC PT look like?

Monday — Strength day – Upper body & Core

Tuesday — Interval Training such as 30:60's (30 sec sprint, 60 sec walk)

Wednesday — Ability Group Run no longer than 30min

Thursday — Strength Training Circuit & Core

Friday — Foot March, Hill Repeats, Terrain Run

Saturday — Swimming, light jog, bike or non-impact cardio and core

0620 – Recovery from Physical Training

Now that we have completed PT– we can't just call it quits and head back to the dorm. WE HAVE TO COOL DOWN AND STRETCH!! DON'T SKIP IT!

Why do we do it?

- To slowly and safely bring heart rate, respiratory rate and body temperature down
- Improve our functional flexibility (being able to touch your toes is a good thing)
- Consists mainly of static stretches held for 20-30 seconds
- Provides opportunity for leaders to conduct AAR on training – How can we make PT better?

After Workout Meal

Goal is to eat within 15min to 1hr of completing physical activity. Body is primed during this time to receive nutrients.

- Eat a 3:1 ratio of Carbs to Proteins. (40-50g of Carbs to 10-13g of Protein)
- Approximately 250 calories should be the goal for your after workout meal
- Drink 8oz to 12oz of water

What is the Story on Sleep?

Your body needs at least 7 to 8 hrs of sleep for recovery. Even if you work out 4 hours a day you will not improve your performance if your muscles aren't given time to recover. Working out more is not always better...SLEEP!!!

Breakfast, Lunch & Dinner

- Eat a rainbow of colors (Vegetables should make up half of your plate).
- Watch portion sizes – Your meat choice should fit in the palm of your hand.
- Watch your intake of fried foods and added sugars, which provide added calories and few nutrients.
- Make half of your grains whole (choose 3 servings of whole wheat bread, rice, pasta or cereal per day).
- Choose low-fat or lean meats and poultry. When possible try to vary your protein sources with more fish, beans, peas, nuts, and seeds.
- Drink milk, water or unsweetened beverages with meals.
- Choose fresh fruit instead of fruit flavored drinks.

BIG FIVE

1. MOVEMENT PREPARATION
2. VIGOROUS EXERCISE (>30min)
3. RECOVERY
4. NUTRITION and HYDRATION
5. REST (7-8HRS sleep a night)

SNACK TIME! (1000-1500-2200)

- You have to fuel the machine!
- Snacks keep the metabolism regulated and prevents you from “crashing” during the day.
- Choose healthy options like fruit, nuts, low-fat yogurt, cheese sticks and peanut butter.

Recommended Nutritional Intake

45-65% of total calories consumed each day should be from Carbohydrates (CHO)

Primarily consume complex carbs like whole wheat grains, vegetables, & fruit. Limit simple carbs such as a candy bar, white bread or anything with simple sugars.

20-35% of diet should be from Fat

Good fats are unsaturated (corn, soybean oil), monounsaturated (olive oil) & Polyunsaturated (fish, peanut oil).

10 –20% of diet should be from Protein

Eat both Animal and Plant Protein. (.8g of protein per kg of body weight is sufficient for most people)

Animal – Lean meat, milk & eggs

Plant – Beans, starchy vegetables, nuts & grains

Take A Multi Vitamin

No reasonable diet can give you 100% of the minerals and vitamins required for peak fitness & health.

WATER, WATER, WATER

If you are exercising you should be drinking *at least* 12 -8 oz cups a day.

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