

DESCRIPTION

16-YEAR-OLD FEMALE

High school soccer player

- She's 5'7" and weighs 130lbs. In the last 2 years she's had 2 stress fractures.
- Trains ~2 hours per day
- She's an honors student; less than 7 hours of sleep per night, feels constantly fatigued.
- No time for breakfast, eats lunch at school but often dislikes what's served, and grabs something from the vending machine after school before practice. After practice, she's often so hungry she grabs whatever she sees first and then eats dinner with her family. She'll often have a bowl of ice cream or cereal before heading to bed.

KEY NUTRITION ISSUES AND REQUIREMENTS

- Calorie range: 2,500-3,000 per day
- Protein: 83—106 grams per day
- Iron (18mg): May need dietary supplements added to diet.
- Calcium (1000mg daily)
- Vitamin D (600 1,000 IU daily)
- Vitamin C: 65mg daily
- Vitamin A: 700mcg or 2,300 IU

NUTRITION SOLUTIONS:

- High probability that she's not eating enough calories or protein on a consistent basis to support her training
- Portable Breakfast/Lunch/Snacks with high nutrient density focusing on calories, protein and calcium.
 - Peanut butter and jelly/honey or a sandwich on bread or bagel or tortilla wrap with lunch meat and cheese, baby carrots, apple or other fruit
 - Nuts/nut butter and pretzels
 - Dried fruit & nuts
 - Granola Bar/protein bar and fruit and/or milk
- More sleep if possible (even 30 extra minutes per night)
- High carbohydrate with protein pre-bed snack
 - Ice cream or frozen yogurt
 - Cereal and milk
 - ½ sandwich or toast w/nut butter & milk or yogurt







DESCRIPTION

18-YEAR-OLD MALE

College athlete (Primarily weightlifting)

- He's 5' 10", weighs 170lbs
- Has a full class load, trains 2-3 hours every day
- Eats 4 protein bars (20g of protein each), and drinks 3 protein shakes (20g per shake) daily to bulk up,
- Includes at least 8 oz. (~80g of protein) of meat or seafood at every meal
- Avoids all carbohydrate foods (potatoes, rice, beans, bread, pasta), including dairy and fruits and vegetables
- Is frequently constipated, fatigues easily from workouts and notes that he gets colds and other illnesses frequently.

KEY NUTRITION ISSUES AND REQUIREMENTS

- Calories required: 3,100 − 3,300
- Protein Needs to promote muscle gain (1.8 - 2.0g per kg): 139 — 154g/day (Currently consumes 240g per day)
- Calcium required: 1,000mg from foods
- Vitamin D: 600 1,000 IU per day

NUTRITION SOLUTIONS:

- Increase carbohydrate and fiber intake to improve workout fatigue and constipation by consuming whole grain breads, cereals, legumes, fruits and vegetables
 - 1 cup of rice, potatoes or cereal at each meal
- · Higher fiber breakfast cereal with milk
- Whole wheat bread for sandwiches
- Toast with peanut butter
- · Black beans or refried beans
- Banana, strawberries, or orange at breakfast
- Broccoli, asparagus, spinach other deep green vegetable at lunch or dinner
- Protein: 30g in 5 eating occasions will provide enough for muscle gain
 - Protein from meals should equal ~80-100g,
 plus 1 protein shake + 1 protein bar
 - Consume whey protein shake made with milk before bedtime to help muscle gain







POUNG FEMALE

- 27 years old, 5'4" and weighs 145lbs
- · Wants to lose body fat, gain muscle
- Works 9 5 in an office, on her computer and sitting most of her workday.
- Works out at her local gym 3x per week for 1 hour right after work then heads home for dinner, spends some time talking on phone with family/friends or catching up on social media then heads to bed around 11pm.
- Typically skips breakfast, eats a salad with chicken for lunch, and either orders take out from local restaurants or eats frozen entrees from her local supermarket.
- She doesn't enjoy cooking but does enjoy fresh, great tasting food. Finds herself snacking heavily after dinner.

KEY NUTRITION ISSUES AND REQUIREMENTS

• Calories required: 2,100 – 2,300

Protein: 92 – 118 g/day

Iron: 18mg/dayCalcium: 1,000mg

• Vitamin D: 600 - 1,000 IU per day

 Main Nutrition Issues: calories need to be shifted to earlier in the day to support workouts, more activity throughout the day to improve metabolism

NUTRITION SOLUTIONS:

- Eat more protein throughout the day; 20-30g over
 4-5 eating occasions throughout the day
 - For breakfast, try protein shake made with whey protein, milk, or milk substitute, ¼ cup of frozen or fresh fruit.
 - Choose higher quality proteins from a variety of sources (lean meats, seafood, milk or milk substitutes, eggs, nuts, beans, etc.)
 - Choose proteins that provide other nutrients: milk has calcium and vitamin D in addition to protein, meat has iron, nuts provide fiber and healthy fats.
- Include more activity throughout the day: stand up from desk every 30 minutes and stretch, take a loop around the office or take the stairs to another floor.
- Types of workouts required: 3-4 x per week of heavy lifting, but also include cardio for additional fitness.
- Consider prepping meals on weekends; try heat and eat meal options from supermarket or order from a meal service that delivers weekly.







DESCRIPTION

YOUNG MALE

- 28 years old, 5' 11" and weighs 205lbs
- Wants to lose body fat, gain muscle.
- Works overnight shift (7pm 7 am) 5 days per week.
- He's frequently tired, gets colds several times a year, and often skips workouts due to his fatigue.
- He lifts weights 2-3 x per week for around 2 hours each time, usually after finishing his shift before heading home to bed.
- On the days he works out, it can be hard to fall asleep.
- He likes to cook but his schedule makes it difficult to plan meals ahead of time.
- He often finds himself hungry with few options so he resorts to fast food during and after work, and relies on protein shakes and bars for breakfast.

NUTRITION SOLUTIONS:

- Adequate protein but poor nutrient density (low vitamins A, C) due to low fruit & vegetable intake
- Working out before work may make it easier to sleep after his shift.
- Grocery shopping may be easier to plan on days off.
- Plan easy meals that provide leftovers like chili, stews, or pan roasted chicken with vegetables.
- Add portable snacks and fruits/vegetables (apples, Clementine's, baby carrots) to round out fast food meals, or add salads/soups to meals.
- Aim for 3-4 workout per week, focusing primarily on heavy lifts. Include 30 minutes of aerobic activities like walking, jogging, rowing, or biking as a warmup for lifting sessions to maintain cardiovascular health.

KEY NUTRITION ISSUES AND REQUIREMENTS

• Calories required: 3,000 - 3,200 per day

Protein: 110—150 grams per day

Calcium: 1000mg daily

Vitamin D: 600 – 1,000 IU daily

Vitamin A: 900mcg or 3000 IU daily

Vitamin C: 90 mg per day







DESCRIPTION BUSY MOM

- Mother of 2 young children, constantly fatigued.
- 35 years old, weighs 160lbs and is 5'6", currently following no exercise program but plans to start a walking program.
- Wants to lose weight gained since the birth of her second child.
- She "diets" all day but snacks after kids go to bed.

KEY NUTRITION ISSUES AND REQUIREMENTS

- Calories required: 2,000 2,200
- Protein required: 70 90 grams
- Iron: 18 25 mg/day depending on iron status
- Vitamin D: 600 1,000 IU per day
- Calcium: 1,000mg per day
- Vitamin A: 700mcg or 2,300 IU daily
- Vitamin C: 75mg daily

NUTRITION SOLUTIONS:

- Set and keep a consistent sleep routine that gives 7 8 hours of sleep per night.
- Stop dieting and strive for a consistent meal plan that provides protein, fiber, Vitamins A & C and more nutrients to address fatigue and evening cravings.
- Low Iron status may be contributing to fatigue: get at least 18 mg/day, supplied by meats, fortified cereals, enriched pasta & breads, beans, and consider an iron supplement.
- Fiber-rich foods (25 35g per day) from whole grains (wheat, oatmeal, corn), beans, fruits, vegetables will more nutrients for fewer calories, helping with cravings and satiety.
- Calcium Vitamin D are provided by dairy products (cheese, yogurt, milk), milk substitutes or supplements.
- May be helpful to meal plan on weekends. Plan meals that provide leftovers.
- Try to walk for 30-60 minutes in the morning before kids get up or right after dinner while dad puts kids to bed.







DESCRIPTION BUSY DAD

- He's 48 years old, 5'11", weighs 210lbs and gained 20 pounds over the last 3 years, especially during the pandemic
- Father of busy school age children, works full time, used to go to the gym regularly but can't now because something "comes up"
- Kids are in so many activities it can be hard to find time to make, let alone sit down for meals
- Skips breakfast, often skips lunch. Starving in the late afternoon and will eat anything that crosses his path (fast food, office treats, etc)
- Last doctor visit, blood pressure was high and he has a family history of diabetes and heart disease.

NUTRITION SOLUTIONS:

- Main Nutrition Issues: lacks a consistent meal and exercise pattern. Needs to increase fiber from fruit, vegetable and grains intake. This will boost nutrients and fullness without adding calories.
- Consider using a meal delivery service or planning
 2-3 easy meals that can be prepped on weekends so
 they are ready for weeknights.
- Easy meals for busy nights: crock pot chili or stew, spaghetti with meat sauce, salmon, or chicken along with roasted vegetables.
- Fast foods need to be considered "emergency" only.
 Sandwiches, cereal and milk, scrambled eggs can be just a fast and provide more nutrients.
- Plan for busy afternoons/ evenings by having easy ready to go snacks like peanut butter and jelly sandwiches, granola bars, bananas, and apples.
- Plan to exercise (daily walk/jog) in the morning especially on days he works from home, meeting a friend might help with accountability or online.
- Consider working with a personal trainer to get back in the routine of strength training.

KEY NUTRITION ISSUES AND REQUIREMENTS

- Calories required: 2,700 3,000 per day
- Protein 95 115 grams per day
- Calcium: 1,000mg per day
- Vitamin D: 600 1,000 IU per day







DESCRIPTION SENIOR MALE

- 75 years old
- He is 5' 6", and weighs 160lbs
- Want to maintain as much strength as possible.
- Retired 7 years ago, and has time to exercise and prefers spending time with friends while doing it
- Enjoys walking most days and takes dance classes, works with a personal trainer 1x per week
- Eats out 2x per week, or eats "heat and eat" meals from the grocery store.
- Has multiple health issues that are managed with medications: type 2 diabetes; high blood pressure, high blood lipids.
- Diagnosed with osteoporosis
- Appetite has decreased, so often grazes on crackers, snack mix, or chocolate instead of eating meals.

KEY NUTRITION ISSUES AND REQUIREMENTS

- Calories required:
 1,900 2,200 per day
- Protein required: 87 102g per day
- · Calcium: 1,200mg
- Vitamin D: 800 IU per day

NUTRITION SOLUTIONS:

- Weight loss is NOT encouraged. Will lead to further nutrient deficits that will have negative health consequences. Strive for high nutrient foods at all meals.
- Have at least 2 high nutrient meals daily; substitute higher nutrient snacks such as nuts, whole grain corn chips & salsa, or whole grain crackers and cheese.
- Included protein in most if not all meals and snacks to maintain muscle mass. Some examples: add 2 tablespoons of chopped walnuts or almonds to cereal or Greek yogurt. Have a morning omelette with vegetables (spinach, mushrooms, peppers, onions) or blueberry pancakes made with high protein flour.
- Add soluble fiber from whole grains, beans, and oatmeal to help both with blood lipid management.
- Calcium sources can be from dairy or milk substitutes or combined with a 500mg supplement 1-2 x per day.
- Strength workouts must be prioritized. Work out with trainer 2x per week and lift heavier weights. Include weight bearing activities such as walking and taking the stairs rather than elevators most days.







DESCRIPTION SENIOR FEMALE

- 75 year old female, 5' 3", 140lbs
- · Retired, widowed
- Has always been "active" but lately has slowed down, energy level not as high
- Has tried exercise classes at times, but has never really enjoyed it
- Used to love hiking and being outdoors but never had time to do much of it; now has concerns about balance and stamina
- Appetite is okay but can be hard to get motivated to prepare food for one person

KEY NUTRITION ISSUES AND REQUIREMENTS

- Calories required:
 1,600 1,800 per day
- Protein required: 76 90g per day
- Calcium: 1,200 mg per day
- Vitamin D: 800 IU per day

NUTRITION SOLUTIONS:

- Daily Walking Program: 1-2 miles per day, 4 5 days per week; use a step counter to track miles and chart it either in a phone app or on a white board. This will encourage motivation and progress.
- · Walk to nearby errands if possible
- Walk at a local indoor facility (mall or similar)
- Walk trails at a local park
- Join a Hiking or Walking Club that focuses on people of all ages. Many regular hikers are retired. Finding like-minded people will help encourage activity
- Balance and Strength Exercises 1-2x per week; this can be online or at a local YMCA or Community Center
- Cooking for one person can be difficult, consider the following:
 - Meal services that will deliver meals weekly
 - Cook 2 larger meals at once that will provide leftovers for the days ahead
 - Nearly all grocery stores offer heat and eat meals, add fresh vegetables, fruit and/or a salad
 - Purchasing meals via takeout usually provides enough food for 2-3 meals especially if additional fruits and vegetables are added



