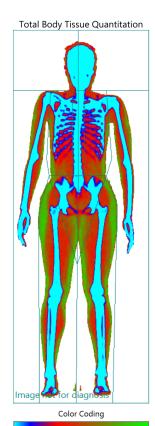




## FINAL REPORT BODY COMPOSITION AND FITNESS LEVEL

#### Nkem



Below is a breakdown of your total body weight, fat mass, free-fat mass, and total fat percentage. Under the Fitness report, you will find information for your true working zones calculated from the fitness test. Below is a breakdown of your total body weight, fat mass, free-fat mass, and total fat percentage. Under the Fitness report, you will find information for your true working zones calculated from the fitness test. Your  $VO_2$ max is excellent considering your age, and biological sex.

#### **Body Composition**

Total Body Weight	Fat Mass	Fat Free Mass	Total fat %
37.66  lbs	92.38  lbs	6.37  lbs	27.6%

 $VO_2$ max and handgrip strength are key indicators of overall fitness, assessing different aspects of physical capacity.  $VO_2$ max measures the maximum amount of oxygen your body can utilize during intense exercise, reflecting cardiovascular and aerobic fitness. A higher  $VO_2$ max indicates better endurance and efficiency in oxygen delivery. Handgrip strength, on the other hand, evaluates muscular strength and is linked to overall muscle function, mobility, and even long-term health outcomes. Together, these measurements provide a comprehensive view of both aerobic capacity and muscular strength, essential components of physical fitness

#### Cardiovascular Fitness Report

VO2 max	25.68  L/kg	Excellent
Strength Report (hand-grip strength)	26 kg	Poor

#### Other measurements

Blood Pressure	Triglycerides	Total Cholesterol	High Density Lipoprotein (HDL-c)	Fasting Glucose	Waist
$119/80~\mathrm{mmHg}$	50  mg/dL	144  mg/dL	79  mg/dL	96  mg/dL	$0~\mathrm{cm}$

**Blood Pressure**: The pressure of the blood on artery walls. Lower resting blood pressure improves cardiac efficiency, reducing stroke and heart risks.

**Triglycerides**: A type of fat in the body that stores energy. It can rise with unhealthy diets, as well as underlying conditions.

**Total Cholesterol**: The sum of various types of cholesterol in the body, such as Low-Density Lipoproteins (LDL), High-Density Lipoproteins (HDL), and Very-Low-Density Lipoproteins (VLDL).

**High-Density Lipoproteins**: Often called the "good" type of cholesterol in the body. It removes free cholesterol from the arteries to the liver, and has an antioxidant and anti-inflammatory effect.

**Fasting Glucose**: The level of blood sugar after 8 hours or more of fasting. It can help assess the risk of developing or existing diabetes.

Waist Circumference: An indication of the amount of visceral fat, a type of fat stored deep in the abdominal cavity. Less visceral fat usually indicates better cardio-metabolic health.

#### **Exercise Prescription**

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Training	Active Recovery	Aerobic Endurance	Mixed	Anarobic Endurance	Maximal Capacity
HR(bpr range)	116 - 125	125 - 134	134 - 143	143 - 152	152 - 161
Energy Source	Fat	Fat	Mixed	Carbohydrates	Carbohydrates



Training zones can be a valuable tool for tracking your progress and optimizing your overall health. By understanding and utilizing these zones, you can tailor your workouts to improve endurance, strength, and cardiovascular fitness while minimizing the risk of overtraining. Monitoring your heart rate within specific zones ensures that you are training efficiently, making each session more effective in supporting long-term health and performance goals.

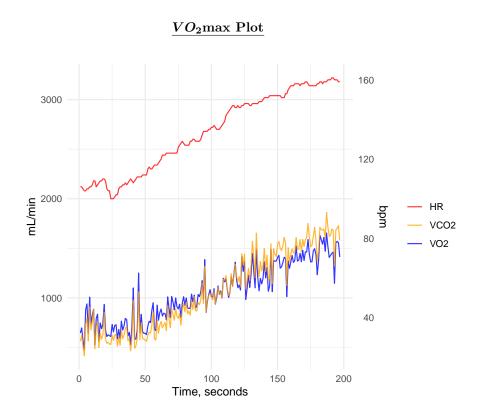
Zone 1: The body is burning primarily fat to supply energy. Examples can include walking, gentle cycling, and stretching.

Zone 2: In this zone, your body is still primarily using fat to produce energy. However this will feel slightly intense. Training in this zone decreases insulin resistance and increase the body's ability to transport oxygen to the muscles.

Zone 3: In zone 3, the body starts using carbohydrates for energy, this makes it less optimal for weight loss, and more for athletic improvement.

 $\underline{\text{Zone 4}}$ : Most of the energy is now coming from carbohydrates. Training in this zone increases your VO2 max, and improves speed.

Zone 5: This zone can only be sustained for a short amount of time. Training in this zone increases your top speed, VO2, and anaerobic performance.



This is your  $VO_2$ max graph. This shows three components: **Blue line:**  $VO_2$  your oxygen consumption rate during cycling. **Orange line:** Carbon dioxide production rate (mL/min). **Red line:** Heart rate in bpm Your ulineoxygen consumption plateaus closer to the end, indicating that you are reaching your  $VO_2$ max which indicates your maximum rate of oxygen consumption. This reflects your cardiorespiratory fitness, and it is considered healthier if your  $VO_2$ max is higher.

# General Nutrition Recommendations

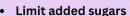
#### **Nutrition Recommendations:**

Based on USDA 2020-2025 Dietary Guidlines for Americans

To promote overall health and prevent chronic disease, follow a healthy dietary pattern at every stage. A balanced eating pattern includes:

- **Vegetables**: A variety of vegetablesdark green, red and orange, legumes (beans and peas), starchy, and other vegetables
  - Recommendation: Aim for 2.5 cups per day
- Fruits: Whole fruits.
  - Recommendation: Aim for 2 cups per day focused on whole fruits over juices
- **Grains**: At least half of grains consumed should be whole grains
  - Recommendation: Aim for 6
     ounces of grains per day, with at
     least 3 ounces from whole grains
- **Dairy**: Fat-free or low-fat dairy, including milk, yogurt, cheese, and/or fortified soy beverages
  - Recommendation: about 3 cups per day
- Protein: A variety of protein foods, including seafood, lean meats, poultry, eggs, legumes, nuts, seeds, and soy products
  - Reccomendation: about 5.5
     ounces per day
- Oils: Oils should be included, with a focus on plant-based oils such as olive, canola, and others
  - Recommendation: about 5 teaspoons per day

#### **Nutrient Dense Choices:**





• Less than 10% of daily calories should come from added sugars.

#### Limit saturated fats



- Less than 10% of daily calories from saturated fats.
- Limit sodium



• Sodium intake should be less than **2,300 mg per day.** 

#### Alcohol



 If alcohol is consumed, it should be in moderation (up to one drink per day for women and up to two drinks per day for men).

#### **Special Considerations:**

For specific life stages such as pregnancy, lactation, or older adults, additional guidance is available in the USDA guidelines to tailor intake to individual needs.



### **Exercise Recommendations**

Based on the American College of Sports Medicine (ACSM) Guidelines

#### Aerobic Exercise:



- Frequency: At least 150 minutes of moderate-intensity aerobic activity, or 75 minutes of vigorous-intensity activity per week.
- **Examples:** Walking, cycling, swimming, or running.
- Recommendation: Spread aerobic activity throughout the week (e.g., 30 minutes, 5 days a week).

#### **Strength Training:**



- Frequency: Engage in musclestrengthening activities on 2 or more days per week.
- Focus: Target all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms).
- Examples: Lifting weights, bodyweight exercises (like squats, push-ups), or using resistance bands.

#### Flexibility and Mobility:



 Include activities that improve flexibility and balance at least 2-3 days per week, such as yoga, stretching, or pilates.

#### **Special Considerations:**



- Older adults: incorporate balance exercises to prevent falls.
- Pregnant and postpartum women:
   Consult with healthcare providers to adapt exercise intensity and type during pregnancy and childbirth

#### Physical Actitvty for Weight Management

A greater amount of physical activity may be necessary for weight loss and the prevention of weight regain. Aim for **300 minutes** or more of moderate-intensity aerobic activity each week, combined with muscle-strengthening exercises.