


```
        background-color: #f0f0f5;
        margin: 0;
        padding: 0;
    } */
```

```
.mnfst-bfc {
    max-width: 500px;
    margin: 50px auto;
    padding: 20px;
    background-color: white;
    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
    border-radius: 10px;
}
```

```
.mnfst-bfc h1 {
    text-align: center;
    color: #333;
}
```

```
.mnfst-bfc label {
    display: block;
    margin-bottom: 8px;
    color: #555;
}
```

```
.mnfst-bfc input,
.mnfst-bfc select {
    width: 100%;
    padding: 10px;
    margin-bottom: 15px;
    border: 1px solid #ccc;
    border-radius: 5px;
}
```

```
.mnfst-bfc button {
    width: 100%;
    padding: 12px;
    background-color: #28a745;
    color: white;
    border: none;
```

```
    border-radius: 5px;
    cursor: pointer;
}

.mnfst-bfc button:hover {
    background-color: #218838;
}

.mnfst-bfc .results {
    margin-top: 20px;
}

.mnfst-bfc .result-item {
    margin-bottom: 10px;
}

.mnfst-bfc .result-label {
    font-weight: bold;
    color: #333;
}
</style>
```

```
<div class="mnfst-bfc">
  <h1>Body Fat Calculator</h1>

  <label for="gender">Sex:</label>
  <select id="gender" onchange="toggleHipField()">
    <option value="male">bărbat</option>
    <option value="female">femeie</option>
  </select>

  <label for="age">Vârsta:</label>
  <input type="number" id="age" placeholder="introdu vârsta" required>

  <label for="weight">Greutate (kg):</label>
  <input type="number" id="weight" placeholder="introdu greutatea" required>

  <label for="height">Înălțimea (cm):</label>
  <input type="number" id="height" placeholder="introdu înălțimea" required>
```

```
<label for="neck">Gât (cm):</label>
<input type="number" id="neck" placeholder="introdu circumferința gâtului" required>

<label for="waist">Talie (cm):</label>
<input type="number" id="waist" placeholder="introdu circumferința taliei" required>

<div id="hipField" style="display:none;">
  <label for="hip">Șolduri (cm):</label>
  <input type="number" id="hip" placeholder="introdu circumferința șoldurilor">
</div>

<button onclick="calculateBodyFat()">Calculează</button>

<div class="results" id="results"></div>
</div>

<script>
function toggleHipField() {
  const gender = document.getElementById('gender').value;
  const hipField = document.getElementById('hipField');
  if (gender === 'female') {
    hipField.style.display = 'block';
  } else {
    hipField.style.display = 'none';
  }
}

function calculateBodyFat() {
  const gender = document.getElementById('gender').value;
  const age = parseFloat(document.getElementById('age').value);
  const weight = parseFloat(document.getElementById('weight').value);
  const height = parseFloat(document.getElementById('height').value);
  const neck = parseFloat(document.getElementById('neck').value);
  const waist = parseFloat(document.getElementById('waist').value);
  let hip = null;

  if (gender === 'female') {
    hip = parseFloat(document.getElementById('hip').value);
  }
}
```

```

// U.S. Navy Method Calculation
let bodyFatPercentage;
if (gender === 'male') {
    bodyFatPercentage = 495 / (1.0324 - 0.19077 * Math.log10(waist - neck) + 0.15456 *
Math.log10(height)) -
    450;
} else {
    bodyFatPercentage = 495 / (1.29579 - 0.35004 * Math.log10(waist + hip - neck) +
0.22100 * Math.log10(
    height)) - 450;
}

const bodyFatMass = (bodyFatPercentage / 100) * weight;
const leanBodyMass = weight - bodyFatMass;

// Jackson & Pollock Ideal Body Fat Calculation
let idealBodyFat = idealBodyFatCalc(age, gender);

const bodyFatToLose = Math.max(0, bodyFatMass - (idealBodyFat / 100) * weight);

// BMI Method for Body Fat (approximation)
const bmi = weight / Math.pow(height / 100, 2);
const bodyFatBmiMethod = (1.2 * bmi) + (0.23 * age) - (10.8 * (gender === 'male' ? 1 :
0)) - 5.4;

// Body Fat Category
let bodyFatCategory;
if (gender === 'male') {
    if (bodyFatPercentage < 6) {
        bodyFatCategory = 'Essential fat';
    } else if (bodyFatPercentage < 14) {
        bodyFatCategory = 'Athletes';
    } else if (bodyFatPercentage < 18) {
        bodyFatCategory = 'Fitness';
    } else if (bodyFatPercentage < 25) {
        bodyFatCategory = 'Average';
    } else {
        bodyFatCategory = 'Obese';
    }
} else {

```

```

    if (bodyFatPercentage < 14) {
        bodyFatCategory = 'Essential fat';
    } else if (bodyFatPercentage < 21) {
        bodyFatCategory = 'Athletes';
    } else if (bodyFatPercentage < 25) {
        bodyFatCategory = 'Fitness';
    } else if (bodyFatPercentage < 32) {
        bodyFatCategory = 'Average';
    } else {
        bodyFatCategory = 'Obese';
    }
}

// Display results
const results = document.getElementById('results');
results.innerHTML = `
    <div class="result-item"><span class="result-label">Body Fat (%):</span>
    ${bodyFatPercentage.toFixed(2)}%</div>
    <div class="result-item"><span class="result-label">Body Fat Category:</span>
    ${bodyFatCategory}</div>
    <div class="result-item"><span class="result-label">Body Fat Mass (kg):</span>
    ${bodyFatMass.toFixed(2)} kg</div>
    <div class="result-item"><span class="result-label">Lean Body Mass (kg):</span>
    ${leanBodyMass.toFixed(2)} kg</div>
    <div class="result-item"><span class="result-label">Ideal Body Fat for Given Age
    (%):</span> ${idealBodyFat.toFixed(2)}%</div>
    <div class="result-item"><span class="result-label">Body Fat to Lose to Reach
    Ideal (kg):</span> ${bodyFatToLose.toFixed(2)} kg</div>
    <div class="result-item"><span class="result-label">Body Fat (%):</span> (BMI
    method): ${bodyFatBmiMethod.toFixed(2)}%</div>
    `;
}

function idealBodyFatCalc(age, gender) {
    if (gender === "male") {
        if (age <= 20) return 8.5;
        else if (age <= 25) return 10.5;
        else if (age <= 30) return 12.7;
        else if (age <= 35) return 13.7;
        else if (age <= 40) return 15.3;
    }
}

```

```
    else if (age <= 45) return 16.4;
    else if (age <= 50) return 18.9;
    else if (age <= 55) return 20.9;
    else return 22; // Можно указать значение для возраста выше 55
} else if (gender === "female") {
    if (age <= 20) return 17.7;
    else if (age <= 25) return 18.4;
    else if (age <= 30) return 19.3;
    else if (age <= 35) return 21.5;
    else if (age <= 40) return 22.2;
    else if (age <= 45) return 22.9;
    else if (age <= 50) return 25.2;
    else if (age <= 55) return 26.3;
    else return 28; // Можно указать значение для возраста выше 55
}
return null; // Если пол не указан, возвращаем null
}
</script>
```

Revision #1

Created 2025-03-15 22:09:22 UTC by David

Updated 2025-04-10 08:43:34 UTC by David