

HTML CODE:

```
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <title>Nutrition Analyzer</title>
  <link
href="https://cdn.bootcss.com/bootstrap/4.0.0/css/bootstrap.min.css"
rel="stylesheet">
  <script
src="https://cdn.bootcss.com/popper.js/1.12.9/umd/popper.min.js"></script>
  <script src="https://cdn.bootcss.com/jquery/3.3.1/jquery.min.js"></script>
  <script
src="https://cdn.bootcss.com/bootstrap/4.0.0/js/bootstrap.min.js"></script>
  <link href="{{ url_for('static', filename='css/main.css') }}" rel="stylesheet">
  <style>
    #result {
      color: #000000;
    }

    body {
      background-color: #a0e4cb;
      background-image:
url("https://www.transparenttextures.com/patterns/mirrored-squares.png");
      /* This is mostly intended for prototyping; please download the
pattern and re-host for production environments. Thank you! */
    }
  </style>
</head>

<body>
```

```

<nav class="navbar navbar-dark bg-dark">
  <div class="container">
    <a class="navbar-brand" href="#">AI-Powered Nutrition Analyzer
for Fitness Enthusiasts</a>
  </div>
</nav>
<div class="container">
  <div id="content" style="margin-top:2em">
    <div class="container">
      <div class="row" style="height:60%">
        <div class="col-sm-6 bd">
          <h3>NUTRITION ANALYZER: </h3>
          <br>
          <p>Nutritional analysis is the process of determining the
nutritional content of food. It is a vital part of analytical chemistry that
provides information about the chemical composition, processing, quality
control and contamination
          of food.Nutritional Analysis ensures that the food has
optimal requirement of vitamins and minerals wherein the examining of
nutrition in food helps in understanding about the fat proportion,
carbohydrates dilution, proteins,
          fiber, sugar, etc.</p>

        </div>
        <div class="col-sm-6">
          

        </div>
      </div>
    </div>
    <div style="display: flex;justify-content:center;">
      <div>

```

```
<h4>Upload Image Here</h4>
<form action="http://localhost:5000/" id="upload-file"
method="post" enctype="multipart/form-data">
    <label for="imageUpload" class="upload-label">
        Choose
    </label>
    <input type="file" name="image" id="imageUpload"
accept=".png, .jpg, .jpeg">
</form>
```

```
<div class="image-section" style="display:none;">
    <div class="img-preview">
        <div id="imagePreview">
        </div>
    </div>
    <div>
        <button type="button" class="btn btn-info btn-lg "
id="btn-predict">Analyze!</button>
    </div>
</div>
```

```
<div class="loader" style="display:none;"></div>
```

```
<h3>
    <span id="result"> </span>
</h3>
```

```
</div>
</div>
</div>
```

```
</div>
</div>
```

```
</body>

<footer>
    <script src="{{ url_for('static', filename='js/main.js') }}"
type="text/javascript"></script>
</footer>

</html>
```

PYTHON CODE:

```
import numpy as np
import os
from tensorflow.keras.models import load_model
from tensorflow.keras.preprocessing import image
from flask import Flask,render_template,request

app=Flask(__name__)

model=load_model('C:/Users/Malan/Desktop/Flask/nutrition.h5')

@app.route('/')
def index():
    return render_template("index.html")

@app.route('/predict',methods=['GET','POST'])
def upload():
    text=""
    if request.method=='POST':
        f=request.files['image']
        basepath=os.path.dirname(__file__)
        filepath=os.path.join(basepath,'uploads',f.filename)
        f.save(filepath)
        img=image.load_img(filepath,target_size=(64,64))
```

```
x=image.img_to_array(img)
x=np.expand_dims(x,axis=0)
pred=np.argmax(model.predict(x),axis=1)
#index=['APPLES', 'BANANA', 'ORANGE', 'PINEAPPLE',
'WATERMELON']
```

```
if pred==0:
    text="""APPLE===>
        *Calories 96
        *Protein - 0.59g
        *Carbohydrate 25g
        *Fats -0.39g
        *Dietary Fiber 4.4g
        *Sugar 14 g
        *Sodium 18mg
        *Potassium 194.7mg"""
    print(text)
```

```
elif pred==1:
    text="""BANANA===>
        *Calories 105
        *Protein 1.39 g
        *carbohydrate 279g
        *Fats 0.49g
        *Dietary fibre 6.14g
        *Sodium 1.2 mg
        *Potassium 422 mg"""
    print(text)
```

```
elif pred==2:
    text="""ORANGE===>
        *Calories 105
        *Protein 0.9g
        *Fats 0.1g
        *Carbohydrate 18g
```

```

        *Dietary fiber 2.39
        *Sugar 9g
        *Sodium 0mg
        *Potassium 173.8mg"""
    print(text)

elif pred==3:
    text="""PINEAPPLE===>
        *Calories 452"
        *Protein-4.99g
        *Fats 11g
        *Carbohydrates -199g
        *Dietary Fiber 139g
        *Sugar 89g
        *Sodium 9.1 mg
        *Potassium 986.5mg"""
    print(text)

elif pred==4:
    text="""WATERMELON===>
        *Calories 1371
        *Protein 26g
        *Fats-7g
        *Carbohydrate 341g
        *Dietary Fiber 18g
        *Sugar 280g
        *Sodium 45.2 mg
        *Potassium 5060.2 mg"""
    print(text)

return text
if __name__=='__main__':
    app.run(debug=False)

```