

## AI-powered Nutrition Analyzer for Fitness Enthusiasts

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### **Configure ImageDataGenerator Class**

ImageDataGenerator class is instantiated and the configuration for the types of data augmentation

There are five main types of data augmentation techniques for image data; specifically:

Image shifts via the `withshiftrange` and `heightshiftrange` arguments.

The image flips via the `horizontalflip` and `verticalflip` arguments. Image rotations via the `rotationrange` argument

Image brightness via the `brightnessrange` argument.

Image zoom via the `zoomrange` argument.

An instance of the ImageDataGenerator class can be constructed for train and test.

#### **Image Data Agumentation**

```
#setting parameter for Image Data agumentation to the traing data
train_datagen = ImageDataGenerator(rescale=1./255,shear_range=0.2,zoom_range=0.2,horizontal_flip=True)
#Image Data agumentation to the testing data
test_datagen=ImageDataGenerator(rescale=1./255)
```