Your simple dietary guide to Weight Loss, preventing and managing Diabetes and Hypertension for Nigerians


What Shouldi

2nd Edition

## Includes 2 FREE NIGERIAN Meal Plans

ODUNAYO ABDULAI

# What Shouldi beEATING? 

Includes 2 FREE NIGERIAN Meal Plans

by
ODUNAYO A B DULA I

The information contained in this book is based on the experience and research of the author. The nutrition advice in this book is not intended to replace advice or treatment provided by your physician. Please consult with your physician before making any dietary changes. OptimumRx disclaims any liability directly or indirectly from "What Should I be Eating?"

## Published br

DeCliff Global Ltd
208, Ikorodu Rd.
Website: www.decliffglobal.com
Email: info@decliffglobal.com
Tel: 08081891971, 08033073882

Copyright © OptimumRx MTM Services
First Edition: 2016
Second Edition: 2018

All rights are reserved. No part of this publication may be reproduced, stored in or introduced into a retrieval system transmitted in any form by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of the copyright owner.

ISBN: 978-9-7895-5769-1

Layout by Folajomi I.

## Contents

| Introduction | v |
| :---: | :---: |
| Cbapter 1 | I |
| Overview of a Healthy Diet | I |
| - What is a Healthy Diet? | I |
| - Components of a Healthy Diet | 2 |
| - Selecting Foods | 5 |
| - Sodium | 8 |
| - Alcohol | I2 |
| - Sweeteners | 14 |
| Cbapter 2 | 16 |
| Benefits Of A Healthy Diet | 16 |
| Cbapter 3 | 19 |
| How to Create Your Healthy Meal Plan | 19 |
| - The Plate Method | 19 |
| - The Food Exchange Method | 2I |
| - Counting Calories | 34 |
| Cbapter 4 | 43 |
| Time to Eat | 43 |
| Cbapter 5 | 44 |
| Nutrition Labels | 44 |
| Cbapter 6 | 49 |
| Cooking Methods | 49 |
| Cbapter 7 | 51 |
| Tips For Eating Healthy \& Sticking To It | 51 |
| Cbapter 8 | 57 |
| Exercise | 57 |
| Cbapter 9 | 64 |
| Common Mrths and Misconceptions | 64 |
| Appendices | 71 |
| Appendix A | 71 |
| Appendix B | 72 |
| Appendix C | 82 |
| Appendix D | 83 |
| References | 84 |

## Introduction

## What Should I Be Eating?

Managing hypertension, diabetes and/ Or high Cholesterol LEVELS, many times, requires the use of medications; however, it should not be the only strategy. Solely relying on medications has resulted in many patients struggling to optimally manage these conditions. So, the question is what else should you be doing?

There are areas of your life that need to be changed or can be improved upon, things that you probably already know about. They include;

- Diet
+ Physical activity
- Weight loss
+ Alcohol
+ Smoking ${ }^{1}$
Lifestyle modifications are an essential part and not an option in the management of these conditions. They are to be included as a part of the initial strategy or sometimes the only initial strategy depending on the severity. ${ }^{2,3,4}$

Making the necessary changes in these areas can be sufficient for some individuals, to manage their conditions without medication. For those who will require medications, there are many benefits for employing both lifestyle modifications and medications, compared to just medications alone.

- Better control of your blood pressure, glucose or cholesterol levels, which reduces your risk of developing serious complications like heart attack, stroke, kidney damage and nerve damage.
- A potential reduction in the dose and/or number of medications that you currently use ${ }^{5}$, which could
- Reduce your pill load
- Reduce the cost of your medications
- Reduce your exposure to the side effects of higher doses of medications
- Make your medications work better
- Besides helping to manage your current medical conditions, lifestyle modifications can help prevent developing others, especially if you have risk factors ${ }^{2,5}$. (Note that having any of these three conditions can cause you to develop the others. For example, having diabetes can lead to hypertension and high blood cholesterol).

This book has been dedicated to helping you understand and put into practice healthy eating, towards better managing your condition.

> I wish you a bealthy and tasteful journey as you go on to "... be in charge of your bealtb"

## Eat Food

## Not Too Much

## Mostly Plants

A - Mantra by Michael Pollan

## Cbapter 1

## Overview Of <br> A Healthy Diet

## - WHAT IS A HEALTHY DIET? .

A simple way to understand what a healthy diet entails is by following the simple mantra: Eat food, not too much, mostly plants ${ }^{6}$. Now let's take this one at a time.

EAT FOOD- this simply means you should try to eat more whole and fresh foods and less of canned and processed foods. ${ }^{6}$

Whole and fresh foods are food items that are basically the way they were when they were harvested with minimal processing, like fresh corn, brown rice, whole wheat items (flour, bread and pasta) and so on. Simply put the more processed a food item is the less healthy it becomes.

Foods are processed for a variety of reasons from, preserving its shelf life to making it taste more appealing. These are usually achieved by the removal of some and in many cases most of the nutritional value of the food item and/or addition of additives, plenty of sugar or salt.

This doesn't mean you need to stay away entirely from canned and processed foods, it's almost inevitable. But you should try to reduce both the frequency and amount you consume, and when you do consume them, ensure you are picking the healthier choices out of the various brands available (how to do this would be treated later, under Nutritional Label)

NOT TOO MUCH- many of us are in the habit of eating till we are so full, we can hardly breathe. Ideally you should eat "till you are no longer hungry". By doing this you end up eating more than you need. Ideally you should eat till you are no longer hungry. ${ }^{6}$

While it might not be easy to immediately start eating exactly what you need, you can start by reducing your portions slowly and steadily. You would gradually become comfortable with these portions and you'd be surprised at how much you used to eat before.

MOSTLY PLANTS- A larger part of your meal should be plant based. Your carbohydrates, vegetables and fruits should make up at least $70 \%$ of your meal, and the remaining animal based such as your meat, poultry, sea food, milk and eggs6. While animal based foods, have their place in our meals, they shouldn't make the major portions of your meals.

## . COMPONENTS OF A HEALTHY DIET .

Now we will discuss the components that make diet healthy. Below is a healthy food pyramid, showing the components and relative portions of how much of each you should have.

## Healthy Food Pyramid



CARBOHYDRATES- this is the energy giving part of our meals. They can be complex or simple. Complex meaning, they need to be broken down into simpler sugars before they can be absorbed. For example, our starches such as yam, rice, wheat, cassava, pasta and so on. Simple carbohydrates are those that are absorbed directly without needing to be broken down, for example, glucose and fructose.

PROTEIN- these provide us with essential amino-acids for healthy muscles, skin and hair. There are plant (beans, peas) and animal (meat, poultry, dairy, fish, shrimps, prawns etc.) based sources of protein. Diary and meat products also contain essential minerals such as calcium, iron, zinc, iodine and chromium.

FATS- Despite the beliefs that fats are bad for you, they are required for general health. Fats help your body synthesize fat-soluble vitamins, such as vitamin D.

NON-STARCHY VEGETABLES AND FRUITS- they contain fiber and essential vitamins and minerals. Non-starchy vegetables contain very little starch compared to the primary sources of carbohydrates. On the other hand, fruits contain more starch than non-starchy vegetables and should be included as a source of carbohydrate when preparing meals, especially if you should eat small fruits at a time.

WATER! WATER!! WATER!!! The human body is composed of 60 percent water, and your brain is composed of 70 percent water. Water is necessary to maintain proper bodily function.

Most individuals should aim for eight to ten 8 -ounce $(240 \mathrm{ml}$ ) glasses of water daily, cold or ordinary; that is about three 75 cl bottles daily. Remember though, the juices the milk and all other liquids you take are included in this amount.

## - SELECTING FOODS •

CARBOHYDRATES- We should try to eat more complex carbohydrates such as our starch sources and less simple carbohydrate (as found in many drinks, ice-cream, sweets, chocolate and so on). Complex carbohydrates digest more slowly, and so release glucose into the bloodstream in a steadier manner, compared to the simpler sugars.

Complex carbohydrates can either be grains such as rice, wheat, millet, oat, bulgur and so on or starchy vegetables such as plantain, yam, potato, cassava, cocoyam and so on.

When choosing grain products, pick the ones that are the most nutritious. Choose whole grains. Whole grains are rich in vitamins, minerals, phytochemicals and fiber. "Refined" flours like white and enriched wheat flour, used to make white bread for example, include only part of the grain - the starchy part, and are not whole grain. They are missing many of the nutrients found in whole wheat flour. ${ }^{7}$

Finding whole grain foods can be a challenge. Some foods only contain a small amount of whole grain but will say it contains whole grain on the front of the package. For all cereals and grains, read the ingredient list and look for the following sources f whole grains as the first ingredient.

Bulgur (cracked wheat), whole wheat flour, whole oats/ oatmeal, whole grain corn/ corn meal, brown rice, whole rye, whole grain barley, triticale, millet, quinoa, sorghum. ${ }^{7}$

PROTEIN- In selecting our protein sources we should try to pick sources with less fat, such as:
lean meat (those which have had their fat trimmed), chicken and turkey (remove the skin to reduce saturated fat and cholesterol), skimmed milk, low fat yoghurt and cheese. ${ }^{8}$
Plant-based proteins generally have lesser amount of fats compared to animal protein. Examples of plant-based protein include, all kinds of beans (pinto, kidney, black beans), peas and nuts. ${ }^{8}$

FATS- There are different kinds of fats, based on their chemistry, but this is what you need to know; you should eat less saturated fat and more of unsaturated fats (mono-unsaturated and poly-unsaturated) and cut down on trans-fat (check food labels for their trans-fat contents). Saturated and transfat have been associated with cardiovascular diseases.

Nuts (pea, cashew, almond, pistachio nuts) and avocados are sources of monounsaturated fats. Fish and seafood are primary sources of polyunsaturated fats. Foods high in cholesterol like seafoods (examples, shrimps, snails, lobsters), organ meat like liver and egg yolks, were formerly thought to increase cholesterol in the blood. However, the recommendation to reduce their intake has been lifted, as there is no evidence to back it up.

This doesn't however, mean that you can eat as much as you like, as they can be high in calories; eat them in moderation.

In selecting vegetable oils, check the labels and pick those with the saturated fat content way less than the combination of the unsaturated fats (the mono plus the poly). Oils rich in unsaturated fats include olive, sunflower, canola, groundnut, soya, bean oil; while those with higher saturated fat content and should therefore be reduced, include palm oil, coconut oil, palm olein (the popular vegetable oils)

NON-STARCHY VEGETABLES AND FRUITS- there are really no rules here, your basis for choice would be mostly on your personal preferences, the availability and costs. You are however encouraged to eat veggies of different colours, as they represent different phytonutrients. So, for example, the phytonutrients offered in red, yellow and green pepper are all different, which is what accounts for their differences in colours. So, the more colourful your dish is, the better!

This might not be possible all the time, for a plethora of reasons, but what's important is that you are eating enough vegetables and fruits.

## - SODIUM .

Most likely, it is not news to you that you should restrict the amount of salt in your diet, because of its sodium content. This is especially important if you are managing hypertension, or trying to prevent it if you have risk factors (such as a family history, sedentary lifestyle, having diabetes or dyslipidaemia).

Excess sodium in your blood would cause you to retain fluids that should have been excreted, this in turn can cause your blood pressure to rise; putting you at an increased risk for heart disease and stroke. It can also cause you to weigh more than you should because your body is holding excess water. This is why some people tend to lose a bunch of weight at the beginning of their fitness journey; when they switch to a healthy diet filled with whole foods cooked at home, they consume less sodium allowing them lose a lot of the water weight besides the fat being burned.

Sodium does not occur only in the form of salt (sodium chloride) in our foods, it is also present as other sodium-containing compounds such as sodium nitrate, sodium citrate, monosodium glutamate [MSG] (usually in seasoning cubes), or sodium benzoate. ${ }^{\text {IO }}$

Sodium is present in the following foods:

- Naturally in foods like celery, beets and milk
- Table sale we add when cooking
- Seasoning cubes and some spice mixes
- Packaged and prepared foods, like soups, canned foods, bread, lunch meats and so on.
+ Fizzy drinks like your soda drinks
Overall, about $75 \%$ of the sodium we consume is from processed, pre-packed and restaurant foods, making it hard for us to control the sodium in our diet
because the sodium has been added before you even buy it. This is why the number one way to reduce your sodium intake is to cook most of your meals. About $12 \%$ is from natural sources in plants and just about $10 \%$ comes from the salt added by us when we are cooking or sitting down to eat.


## * RECOMMENDATIONS *

It is recommended that you aim to eat no more than 1,500 milligrams of sodium per day. That level is associated with a significant reduction in blood pressure, which in turn reduces the risk of heart disease and stroke. ${ }^{\text {IO }}$ Because the general population's sodium intake is so excessive, even cutting back to no more than 2,400 milligrams a day will significantly improve blood pressure and heart health. ${ }^{\text {IO }}$

Here are the approximate amounts of sodium in a given amount of table salt:

- $1 / 4$ teaspoon salt $=575 \mathrm{mg}$ sodium
+ $1 / 2$ teaspoon salt $=1,150 \mathrm{mg}$ sodium
+ $3 / 4$ teaspoon salt $=1,725 \mathrm{mg}$ sodium
+ 1 teaspoon salt $=2,300 \mathrm{mg}$ sodium
Also, note that a cube of the popular seasoning cubes has about 800 mg of sodium.

The following foods are almost always high in salt:

> Bread and rolls ${ }^{\text {IIA }}$, cold cut and cured meat (such as bacon, sausages, corned beef, ham, salami, pepperoni), olives, cheese, salted and dry roasted nuts, salt fish, smoked meat and fish, soy sauce, yeast extract. ${ }^{\text {II }}$

To cut down on salt, eat them less often, have smaller amounts or pick brands with less sodium; you will need to read the nutrition label to determine this (more under the chapter on Nutrition Labels). Generally:

+ 120 mg of sodium per 100 g is best
+ Less than 400 mg per 100 g is okay
+ Be wary of products with more than 400 mg per 100 g
NB : Look for the column that says per 100 g on the nutrition label and check for sodium.


## * TIPS TO HELP YOU REDUCE YOUR SODIUM INTAKE *

As stated earlier most of the sodium we consume is present in our food before we even start cooking, so we will be treating how to reduce the sodium in food items we purchase first.

## BEFORE COOKING

- Generally, the number one way to reduce sodium intake is to cook your own food. That way you are in control of the amount of salt and seasoning that goes into your food. Bottom line is to reduce the amount of cooked food you buy.
- When buying packaged products, like bread and canned foods, choose those with the lowest sodium you can find by comparing the labels of different brands.
- When buying nuts, such as cashew, almonds, pistachios, pick the unsalted ones. ${ }^{\text {I2 }}$
- For canned foods like sweet corn, kidney beans, green peas, rinse under running water for about a minute. Transfer it into a sieve and place under a tap. You can get out up to $60 \%$ of the sodium present this way. ${ }^{13}$
+ When buying frozen vegetables, choose those that are labelled "freshly frozen" and do not contain added seasoning or sauces (read their labels).


## WHEN COOKING

- When cooking starchy foods, like your rice, pasta, yam, oat potato, skip the salt. You're likely going to add other flavourful ingredients to these foods, so you won't miss the salt. ${ }^{13}$
- Use flavourful cooking methods. For example, grilling or roasting your protein would make them taste nicer versus boiling for example, allowing you use less amount of salt and seasoning cubes.
- Use onions, garlic, herbs, spices, vinegar and citrus juices like lime juice in place of some or all of the salt to add flavour to foods. ${ }^{13}$
- Salt preference is an acquired taste that can be unlearned. It takes about 6-8 weeks to get used to eating food with much lower quantities of sat, but once it's done, it's actually difficult to eat foods that are high in salt because they would taste too salty. ${ }^{12}$


## - ALCOHOL .

Drinking too much can worsen your condition. It is recommended that you limit your alcohol consumption to no more than two drinks per day for men and no more than one drink per day for women. ${ }^{\text {I4 }}$
Below is an illustration of how much alcohol of different percentages, is equivalent to one drink.


Here are some things you should consider when consuming alcohol,

+ Drink with food
+ Drink slowly
- Avoid sugary mixed drinks and sweet wines ${ }^{15}$


## WHY YOU SHOULD RESTRICT YOUR ALCOHOL INTAKE

- Having more than 3 drinks in one sitting can increase your blood pressure to unhealthy levels temporarily, but repeated binge drinking can lead to long-term increase.
- Moderate amounts of alcohol can cause blood glucose to rise, while excessive amounts can cause it to drop to dangerously low levels.
- Beer and sweet wine contain carbohydrates and may increase your blood sugar.
- Alcohol can interfere with your diabetes medications and insulin.
- Alcohol can increase your triglyceride levels (a type of fat in your blood)
+ Alcoholic drinks often have a lot of calories, making it more difficult to lose excess weight. ${ }^{15}$ (see more below)
- Alcohol makes you prone to cancers of your digestive tract such as cancer of the mouth, oesophagus, stomach and intestines.
- Alcohol is processed by the liver, the more you drink, the more work you are giving your liver. The liver has a limit, after which it starts releasing harmful chemicals that harm the liver cells, causing cirrhosis (permanent damage to liver cells) and liver cancer.
- Excessive drinking can also affect the sexual organs and cause erectile dysfunction in men.

Below is an illustration of calories in one drink of alcohol.


## - SWEETENERS •

Artificial sweeteners are a great replacement for sugar or honey in your teas, cereals, baked items and so on.

Note: Honey contains natural sugars, therefore you should regulate the amounts same way you regulate your quantity of table sugar. The fact that honey is natural does not mean you can use as much as you like, it can raise your blood sugar as well.

When using artificial sweeteners, check the package of the sweeteners for the serving size. Some sweeteners have a bitter after-taste, some can cause you to purge if you use too much (the ones that contain sorbitol for example or xylitol). Sweeteners are generally either low calorie or zero calories.

Low calorie sweeteners include those that contain, xylitol, maltitol, mannitol, sorbitol, sometimes combined with glucose (dextrose) or fructose. They contribute to the carbohydrate in the diet but not as much as normal sugar ${ }^{16}$. For this reason, diabetic patients should discuss their choices with their health care provider for individual advice.

In choosing between low calorie sweeteners, compare the amount of calories per serving, choose those with lesser calories. Those with fructose are generally not recommended because they can contribute to increasing cholesterol levels. ${ }^{17}$

Zero calorie sweeteners include those that contain saccharin, aspartame, sucralose, stevia. These sweeteners add very minute calories to your diet and may be more suited for diabetic patients counting their carbohydrates. ${ }^{16}$

The table below shows examples of common brands of sweeteners, their content.

| S N | Brand | Components | CALORIE COUNT |
| :--- | :--- | :--- | :--- |
| 1 | Canderal | Aspartame, acesulfame, <br> Dextrose | 3 calories per stick |
| 2 | Tropicana Slim <br> (Low calorie) | Sorbitol, Sucralose, <br> Acesulfame-K, corn powder | 5 calories per stick |
| 3 | Tropicana Slim <br> (Zero calorie) | Sorbitol, Sucralose | 0 calories per stick |
| 4 | Truvia | Stevia, Erythritol | $<1$ calorie per stick |
| 5 | Sweetex | Saccharine | 0 calories per tablet |
| 6 | Sweet'N Low | Acesulfame, Aspartame, <br> Dextrose, Maltodextrin | 3calories per stick |

Sweeteners are generally very much sweeter than sugar, and so you would require smaller amounts. ${ }^{18}$

Sweeteners undergo very strict approval procedures for safety, and it has been ensured that the amounts you end up consuming daily over a lifetime, are way less than the smallest amount that can cause you any harm. ${ }^{19}$

## Chapter 2

## Benefits Of A Healthy Diet

CONTROL WEIGHT- Eating the right diet will help you maintain a healthy weight, lose weight if you are overweight and gain weight if you are underweight. Chronic conditions like diabetes, hypertension, dyslipidaemia have been linked with obesity, and so one of the cornerstones of their management is weight loss for overweight people. ${ }^{20,21,22}$

Studies have shown that losing weight reduces or prevents high blood pressure, blood glucose levels and blood lipids. ${ }^{23}$ For example losing 10 kg of weight can reduce your blood pressure by up to 20 mmHg and losing excess weight especially around your belly helps improve insulin function, reducing your blood sugar.

INCREASED PRODUCTIVITY- Like a car, your body and brain need quality fuel to run efficiently. Eating healthy boosts your energy, making you more efficient and increasing your focus in your day to day activity. Studies have shown unhealthy diet to be one of the primary causes of low productivity. ${ }^{23}$

ENHANCED MOOD-Although there is no single food that acts as a proven antidepressant, maintain stable levels of blood sugar, through regular proper nutrition will help you feel better overall on most days. ${ }^{23}$ Eating healthy can reduce stress too, by regulating the release of stress hormones.

BE HEALTHIER AND LIVE LONGER- The vitamins and minerals in the diet are vital to boost immunity and healthy development. A diet rich in fruits and vegetables, in combination with exercise, can protect you from diseases such as obesity, diabetes, cardiovascular diseases and some types of cancers, helping you to live a longer healthier life. ${ }^{23}$

## * YOUR DIET AND BLOOD PRESSURE *



What you eat has a significant effect on your blood pressure. If you are hypertensive it is recommended that you follow the DASH diet. It stands for Dietary Approach to Stop Hypertension, and will help you:

+ Lower your systolic blood pressure (upper number) by up to 14 points
- Lower your cholesterol levels
- Lose excess weight. Losing 10 kg of weight can lower your systolic blood pressure (upper reading) by up to 20 mmHg

The dietary guidelines in this book will help you achieve these goals.

## * YOUR DIET AND BLOOD SUGAR *



Your diet has an enormous effect on your blood sugar, as it affects how much sugar enters your bloodstream and your weight. Excess weight around your abdomen especially, reduces the efficiency of the insulin in your body.

Normally insulin helps to move sugar from your blood into the muscles for storage, when it becomes less efficient as in diabetes, more sugar ends up staying in your blood.

Therefore your diet should be targeted towards

- controlling the amount of carbohydrates and sugars you consume
- getting in the right type of carbohydrate
- helping you shed excess weight if you are overweight

Following the steps in this book would help you achieve these goals.

## Cbapter 3

## How to Create Your Healthy Meal Plan

There are different methods of creating your own ideal plan, and we will be discussing three of these methods. You can follow whichever suits you better.

They include:

- The plate method
- The Food exchange method
- Counting calories


## * THE PLATE METHOD *

One of the easiest ways to plan your meal is using "The Plate Method". This method involves you eating more non-starchy vegetables and lesser portions of starch and protein. It involves you using your plate to determine the portions of your food. ${ }^{24}$

The amount of each component you should be eating can be easily determined using your plate as shown in the image below. The size of your plate should be 9 " across. ${ }^{25}$ However, plates are much larger these days, back in the days they used to be smaller. Bigger plates have led to bigger portions, which have contributed to the epidemic of obesity in our society today.


> Half of your plate should be filled with vegetables, one quarter with protein and the last quarter with starch. Then add one fruit and a glass of low fat milk. Take at least one glass of milk daily.

## To get started just follow these simple steps:

- Get a plate that is 9 inches across (using a much bigger plate, means you will be eating more than you should using this method, or at least try to keep the food within a 9 " circumference)
- Divide the plate into two equal halves, and then divide one of the halves into two, as shown.
- Half of your plate should be filled with non-starchy vegetables, a quarter with starchy foods and the last quarter with protein.
- Add a small fruit and a glass of low fat milk or yoghurt (you should try to have 2-3 servings of low fat milk or yoghurt daily)
- Choose healthy fats in small quantities. For cooking use oils low in saturated fat as mentioned earlier. For salads, some healthy additions are nuts and avocado.
- To complete your meal, add a low-calorie drink like water, unsweetened tea or coffee. 25 (You can use sweeteners instead of sugar. See more under sweeteners)

Below are examples of what your plate could look like.


Wheat, with efo-riro (cooked with very minimal oil) and boiled peppered goat meat


Rice with stew (cooked with minimal oil) with coleslaw, grilled chicken breasts and a small apple

## - THE FOOD EXCHANGE METHOD .

If you are managing diabetes and/or trying to lose weight, you can opt for this more stringent method of measuring your food portions. This method involves counting your carbohydrates and will require you invest more time to understand and use it especially when you just start; it gets a lot easier as you use it.

However, if you feel this method seems bulky to you, the plate method can take care of your needs.

## Below is a step by step approach of how to go about using the food exchange method.

- Calculate your BMI, to determine if your weight is ideal or not
- If you need to lose weight, determine, how much weight you need to lose based your chosen target BMI. The purpose is to know what your weight loss target it, so when you reach your goal, you can adjust the diet to maintain your new weight. If your weight is ideal move to the next step.
+ Calculate how many calories you need to consume daily to maintain your weight, lose or gain weight.
- Determine how many portions of each food class you should consume per day, based on your calculated calorie requirement per day. You do this using the Exchange Meal Plan (Appendix A)
- Split the portions into breakfast, snack, lunch and dinner.
- Use the Food exchange list to create a meal plan for yourself.

The process might seem a little daunting at first, but be assured that it gets a lot easier, as you use the tools. Be patient, remember why you are doing it and see it as a fun experiment. It'll be very much worth the effort!

## STEP 1- CALCULATE YOUR BMI (AND DETERMINE HOW MUCH WEIGHT YOU SHOULD LOSE IF YOU NEED TO)

This is achieved by calculating your Body Mass Index(BMI) which relates your weight to your height. It is measured in $\mathrm{Kg} / \mathrm{m}^{2}$, and calculated thus: $\mathrm{BMI}=$ Weight in $\mathrm{Kg} /(\text { Height })^{2}$ in m

Example: Mr. Benjamin weighs 81 Kg , with a height of 1.64 m . His BMI would be: $81 / 1.64^{2}=30.11 \mathrm{Kg} / \mathrm{m}^{2}$

| BMI $\left(\mathrm{KG} / \mathrm{M}^{2}\right)$ | Designation | IMPLICATIONS |
| :--- | :--- | :--- |
| $<18.5$ | Underweight | You need to gain weight |
| $18.5-25.0$ | Ideal weight | Maintain your current weight |
| $>25.0-30.0$ | Overweight | You need to lose weight |
| $>30.0$ | Obese | You need to lose weight |

From the table, Mr. Benjamin is obese because his BMI is between greater than $30 \mathrm{Kg} / \mathrm{m}^{2}$. Therefore, he needs to lose enough weight that would bring his BMI towards the ideal $18.5-25.0 \mathrm{Kg} / \mathrm{m}^{2}$.

## Determine how much weight you need to lose

You need to do this so you know when you have reached your goals of an ideal BMI, and change your diet to maintain the new weight.
However, your immediate target should be to lose about $10 \%$ of your current weight, which would be 8 kg for Mr. Ben, as doing this significantly reduces your blood sugar, pressure and/or cholesterol; it also reduces your risk for complications such as heart disease and stroke.

Weight loss requires commitment and discipline but I assure you that benefits are well worth it. However, do not expect to lose all the excess weight in a couple of weeks, it takes time. In fact, there are weeks you would weigh yourself, and you realise you didn't lose weight (most probably because you
cheated during the week), don't be discouraged, keep putting the effort and learn from your mistakes.

To track your progress, weigh yourself weekly; first thing in the morning, before you eat or drink anything, wearing little to nothing. This is the best time to weigh yourself.

To determine how much weight to lose, first determine what BMI goal you seek to achieve, and then use the target goal to determine your ideal weight. You should try to achieve a BMI between two extremes of the ideal range i.e. between 18.5 and 25 . You can play around a little here, for example, if you'd like to be slim, you would target a BMI towards the 18.5 margin, but if you are the type that likes "having more flesh", you could target a goal towards a BMI of 25. It is advisable to stay away from the extremes, as your weight could fluctuate either way.

For Mr. Benjamin for example, if he decides to target a BMI of say, 23.5, based on his height his ideal weight should be:

Target BMI X Height ${ }^{2}=23.5$ X $1.64 \mathrm{~m}^{2}=23.5 \times 2.69=63.2 \mathrm{Kg}$, which is approx. 63 Kg

To find out how much he needs to lose, we subtract his ideal weight from his current weight, so we have: $81 \mathrm{Kg}-63 \mathrm{Kg}=18 \mathrm{Kg}$.

Therefore, Mr. Ben, needs to lose 18 Kg to attain a normal BMI of $23.5 \mathrm{Kg} / \mathrm{m}^{2}$

## STEP 2 - CALCULATE HOW MANY CALORIES YOU NEED TO MAINTAIN, LOSE OR GAIN WEIGHT

In planning what you should be eating, first you need to determine what you need. The foods we eat are in essence converted to energy (measured in calorie [cal] or kilojoules [ kJ$]$ ) in our body, besides the vitamins and minerals that have other functions. Any food that contains carbohydrate, protein or fat will have calories, the amount will then be determined by how much of these food
classes they contain; this means that even vegetables have calories because they contain some carbohydrate and protein.

The amount of food you need to consume is based on the amount of energy you require for your daily activities. A number of factors determine the amount of energy you need.

+ METABOLISM- The living body needs a minimum amount of energy to maintain vital functions, such as breathing and keeping the heart beating when the body is at rest. This minimum number is called the Basal Metabolic Rate (BMR). It is usually higher in men than in women. ${ }^{26}$
- LEVEL OF ACTIVITY - the more physically active you are, the more energy you'd need. ${ }^{26}$
- AGE-your energy needs peak at age 25, after which it begins to decline by $2 \%$ after every 10 years. This occurs because aging causes replacement of muscle with fat which burns less energy than muscle. Doing strengthening exercise, such as weightlifting, that keeps your muscle intact would help you burn more calories. ${ }^{26}$
+ SEX- men generally need more energy than women, because they have more muscles, about $10-20 \%$ more than women of the same age and size.
+ GENETICS- genes you inherit from your family would determine your BMR, and how you burn calories. ${ }^{27}$
- BODY SHAPE AND THE SHAPE YOU ARE IN - the more muscle you have, the higher your metabolism, and so you will require more energy. ${ }^{26}$

Using the information above you can determine how many calories you need per day, by using the following formula,

First determine your basal metabolic rate, using this equation, called The Mifflin St Jeor equation ${ }^{28}$ :
Men: $\mathrm{BMR}=(10 \mathrm{X}$ weight in Kg$)+(6.25 \mathrm{X}$ height in cm$)-(5 \mathrm{X}$ age $)+5$ Women: $\mathrm{BMR}=(10 \mathrm{X}$ weight in Kg$)+(6.25 \mathrm{X}$ height in cm$)-(5 \mathrm{X}$ age $)-$ 161

Using Mr. Ben as an example,
$\mathrm{BMR}=(10 \times 81 \mathrm{Kg})+(6.25 \times 164 \mathrm{~cm})-(5 \mathrm{X} 60)+5=1540 \mathrm{cal} /$ day

Therefore, Mr. Ben needs $1540 \mathrm{cal} /$ day to maintain his vital functions.

Now you need to account for the energy you need to carry out your daily activities and for any extra exercise that you do. You do this by multiplying the BMR by the appropriate factor (depending on where you think you fall), using the table ${ }^{29}$ below.

| Level of Physical Activity | FACTOR |
| :--- | :--- |
| Sedentary (little to no regular exercise) | 1.2 |
| Mild activity (intense exercise for at least 20 minutes 1-3 times per <br> week. |  |
| This may include things like brisk walking, bicycling, jogging, <br> basketball, swimming etc. If you do not exercise regularly, but you <br> maintain a busy life that requires you to walk frequently for long <br> periods, you meet the requirements for this level) | 1.375 |
| Moderate activity (intense exercise for 60min 3 to 4 times per week. <br> Any of the activities listed above will qualify) | 1.55 |
| Heavy or labour intensive activity (intense exercise for 60min or <br> greater, 5 to 7 days per week. Labour intensive occupations also <br> qualify for this level, such as bricklaying, carpentry, general labour, <br> farming etc.) | 1.7 |
| Extreme activity (Exceedingly active and/ or very demanding <br> activities, such as athlete with an almost unstoppable training <br> schedule, very demanding jobs such as shovelling coal or working <br> long hours on an assembly line) | 1.9 |

Let's assume Mr. Ben lives a sedimentary lifestyle with little or no exercise, his approximate daily caloric allowance is:

1540 X $1.2=1848$, approx. 1900 calories/day
Therefore Mr. Benjamin needs to consume 1900cal daily to maintain his current weight.

NB: It is not recommended that women consume less than $1200 \mathrm{cal} /$ day or men consume less than $1500 \mathrm{cal} /$ day. ${ }^{30}$

To lose weight Mr. Ben should do two things:

- Reduce his caloric intake
- Increase his physical activity

It is advised that you do both as they work in harmony in helping you achieve your weight loss goals. Exercising without controlling your diet would give you minimal results that can easily frustrate you, but together with the right nutrition, you would be amazed at your results.

Before we go on, it is important to know that controlling your diet, doesn't mean you are going to starve, as will be shown later, your meals can be healthy and still be very satisfying and delicious.

To lose 0.5 Kg per week, you should cut 500 calories from your daily allowance. But when coupled with exercise the weight loss can be greater. ${ }^{31}$

To lose 1 kg per week, remove 1000 calories from your daily allowance.
To gain 0.5 Kg per week, you should add 500 calories to your daily allowance and to add 1 Kg you add 1000 calories.

Being that Mr. Benjamin needs to lose weight, we should subtract 500 cal from his daily caloric allowance; he should therefore consume, $1900-500=$ $1400 \mathrm{cal} /$ day.

As mentioned earlier because men are not recommended to consume less than $1500 \mathrm{cal} /$ day, Mr. Ben cannot go lower than $1500 \mathrm{cal} /$ day. As much Mr. Ben's new daily caloric allowance is 1500 cal .

## STEP 3- DETERMINE HOW MUCH FOOD YOU WOULD BE CONSUMING

Based on the calculated caloric allowance, we can determine how much of the following you would need,

- Carbohydrates- the following constitute carbohydrate in your diet
- Starches- mostly grains and starchy vegetables
- Milk- necessary to provide you with necessary minerals
- Fruits and vegetables- provide you with necessary vitamins and fiber.
- Legumes (beans and peas)

Sugar

- Proteins- the following constitute protein in your diet
- Poultry (birds and eggs)
- Dairy (milk and cheese)
- Meat
- Seafood
- Legumes
- Nuts
- Fats- the following constitute fat in your diet
- Cooking oils
- Butter and margarine
- Salad dressing and mayonnaise
- Plants based fat like avocados
- Nuts (almond, pea, cashew, pistachio)
- Milk and cheese
- Meat and poultry

Note: As stated under "Selecting Foods" the amounts of fat in milk and yoghurt can be reduced by selecting skimmed or low-fat milk and yoghurt choices. Fat in meat and poultry can be reduced by trimming off the fats before cooking.

For poultry removing the skin will also reduce the amount of fat you consume.
Using all this information you can determine how much of each you need to eat. To make this easier and eliminate the more rigorous calculations involved in this, we would be using an Exchange Daily Meal Plan (Appendix A)32, this list shows you how much of each food class you need, based on your caloric needs.

According to the table in Appendix A, 1500cal is equivalent to: 7 portions of starch, 3 portions of fruit, 2 portions of milk/ yoghurt, 3 portions of vegetables, 5 portions of meat and other protein and 4 portions of fat.

It is important to state that the portions stated in Appendix A are only true if you use skimmed milk and when your half of your protein portions come from the low fat options and the remaining half come from the medium fat selections. Using the above as an example, 3 portions should come from the low fat options and two portions from the medium fat options.
You can then split the portions into breakfast, lunch, dinner and in-between snacks.

## STEP 4- SPLIT THE PORTIONS INTO DAILY MEALS

So, for Mr. Ben, his daily portions can be split as shown in the table below:

| FOOD CLASS PORTIONS | BREAKFAST | SNACK | LUNCH | DINNER | TOTALNO. OF <br> PORTIONS |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Starch | 2 | 0 | 3 | 2 | 7 |
| Fruits | 1 | 1 | 1 | 0 | 3 |
| Milk/ yoghurt | 1 | 1 | 0 | 0 | 2 |
| Vegetables | 1 | 0 | 1 | 1 | 3 |
| Meat $\&$ other Protein | 2 | 0 | 3 | $0 / 1$ | $5 / 6$ |
| Fats | 2 | 0 | 2 | 0 | 4 |

The above is just an example and can vary, so long as the total number of portions does not vary significantly. For instance, he could decide to have milk portions for snacks and at dinner/ lunch.

NB:

- In splitting your portions, try to ensure you do not eat too much at a time and too little at another, especially if you have diabetes. For example even though 2 portions of starch in the morning, 5 at lunch and none at dinner still gives 7 portions, you may notice that your blood sugar stays high after lunch, in which case you would have to reduce your lunch portion next time. Which is why monitoring is important, especially when you start a new diet, it can help you make the necessary adjustments to your meal.
- Luckily you can play around the portions of your vegetables; because they do not amount to many calories, you can take more portions than stipulated with moderation. They help to keep hunger away.

The above table shows the foods in portions, so the question is what makes each portion? This can be determined using the Food Exchange List (Appendix B). ${ }^{33}$

This list gives examples of what a portion of starch, protein, milk, vegetable, fruit and fat should be. An example of what Mr. Ben's meal plan could look like for a particular day, following the allocations can be shown below:

| Food Class Portions | Breakfast | SNACK | LuNCH | Dinner | Total No. of Portions |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Starch | 2- 2 slices of white bread or 4 slices of whole wheat bread | 0 | 3-1 cup rice | 2-1 small (baby) plantain | 7 |
| Fruits | 1-1 apple | 1-1 orange | 1-1 apple |  | 3 |
| Milk/ yoghurt | $1-1 / 3$ <br> cups of dry skimmed milk powder | 1-2/3 cup low fat yoghurt | 0 | 0 | 2 |
| Vegetables | 1-1 cup coleslaw | 0 | 2-1 cup cooked vegetable or 2 cups coleslaw with fatfree salad dressing | 2-2 cups of coleslaw | 5 |
| Meat and other protein | 2-2 eggs | 0 | 3-1 chicken thigh | 1-1 egg | 6 |
| Fats | $\begin{aligned} & \hline 1-1 \\ & \text { teaspoon } \\ & \text { olive oil (to } \\ & \text { fry egg) } \end{aligned}$ | 0 | 2-2 <br> teaspoons of otive oil (from the stew or used to cook the rice like in Jollof rice) | 1-1 <br> tablespoon <br> of salad dressing or two tablespoons of low fat dressing | 4 |

## Portions can be measured using measuring cups and a food scale



Using this method, you can make a meal plan by yourself for the week, bearing in mind you can repeat meals during the week. It doesn't have to be the something different every single day.

See the sample plan for Mr. Ben based on $1500 \mathrm{cal} /$ day.

|  | BREAKFAST | SNACK | LUNCH | Dinner |
| :---: | :---: | :---: | :---: | :---: |
| MON | 2 slices of white or wheat bread + fried egg* +2 large lettuce leaves + 1 cup skimmed milk +17 grapes (or 1 cup) or 1 small apple | 1 medium sized boiled or roasted corn | 1 cup cooked white rice/ Jollof rice +1 cup coleslaw + 1 medium sized chicken breast (boiled or grilled) | Salad- <br> Vegetables of choice (e.g. cabbage, tomatoes, carrots, lettuce) +1 small boiled plantain +1 boiled egg or $1 / 2$ can baked beans +2 tbsp low-fat dressing or 1 tbsp regular |
| TuE | 2 boiled small sweet potatoes (or 1 cup diced) + fried egg + 1 cup skimmed milk | 2 cups watermelon | 1 cup cooked pasta + stir-fried veggies in 10 mls olive oil + 1 mid-piece or tail of fish +1 small apple or orange | $1 / 2$ eko wrap + 1 cup efo-riro (minimal oil) or oil-less peppersoup with chopped veggies +1 large snail or 1 piece of fish |
| Wed | 1 boiled small plantain + veggie/ ${ }^{1 / 2}$ can tuna fish sauce, fried with 10 mls olive oil +1 cup skimmed milk +1 small apple | 17 grapes or 1 cup | $1^{\mathrm{I} / 2}$ cup beans with chopped carrots +1 boiled small plantain + 1 orange | $\begin{aligned} & 1^{\mathrm{I} / 2} \text { cup cereal } \\ & +1 \text { cup milk } \\ & +3 \text { medium } \\ & \text { sized carrots } \end{aligned}$ |
| Thu | $1 / 2$ cup raw oats (then cook) +1 cup skimmed milk +1 small banana +1 midpiece of fish | ${ }^{2 / 3}$ cup low <br> fat yoghurt + 1 orange | 1 portion Eba + 1 cup efo or okro +2 large snails+ 1 cup orange juice | 1 small moinmoin +1 cup coleslaw or efo |
| Fri | Same as Monday |  |  |  |
| SAT | Same as Tuesday |  |  |  |
| SUN | Same as Wednesday ( this is cheat day, you can indulge a little) |  |  |  |

[^0]Below are more meal samples


Eba With Okra \& Fish

## DETAILS

+ 3 portions of starch (3/8 cup of garri for Eba)
+ 3 portion protein (Approx. one fishtail)
+ 1 portion of non-starchy vegetable (okra)
+ 1 portions of fat ( 1 teaspoon of palm oil to cook okra)


Oat With Milk, Banana \& Boiled EgG

## DETAILS

+ 2 portions of starch ( $1 / 2$ cup of uncooked oats)
+ 1 portion of fruit (1 banana)
+ 1 portion protein, medium fat selection ( 1 whole egg)
+ 1 portion of milk ( $1 / 3$ cup of skimmed milk)


Plantain with eggs fried, Veggies \& One small orange

## DETAILS

+ 2 portions of starch ( 130 g plantain)
+ 2 portions protein ( 2 whole eggs)
+ 1 portion of non-starchy vegetable (1 cup of mixed vegetables)
+ 1 portion of fruit ( 1 small orange)
+ 1 portion of fat (1 teaspoon of
+ sunflower oil)


SWEET POTATOES WITH FISH STEW \& TEA

## DETAILS

+ 2 portions of starch ( 150 g of sweet potatoes)
+ 2 portions of protein ( 56 g of titus fish)
+ 1 portion of vegetables ( 1 cup mixed veggies- carrots, green pepper, red pepper, onions)
+ 1 portion of fat ( 5 ml of sunflower oil)
+ 1 portion dairy ( $1 / 3$ cup of powdered skimmed milk)


## * COUNTING CALORIES *

The food exchange method in the previous chapter can help create a meal plan, you can decide to count calories instead. So after you determine the number of calories you need to consume to lose weight, you can split into meals.

So for example, for Mr. Ben who needs 1500 calories, we can split it thus:

| + | Breakfast: 400 Cal |  |
| :--- | :--- | :--- |
| + | Sreakfast: 400 Cal |  |
| + | Snack: 150 Cal |  |
| + | Lunch: $450 \mathrm{Cal} \quad$ OR | Snack: 200 Cal |
| + | Snack: 100 Cal |  |
| + | Dinner: 400 Cal |  |
| + | Dinner: 400 Cal |  |
| + Total: 1500 Cal |  |  |

As you can see above, the way you split can be flexible, just make sure it all adds to the right number of calories. I will also advise that you don't eat too much at a particular time, and too little at another. If you eat too little, you may be tempted to eat more and then overshoot your target calorie intake.

When trying to bring a meal together, it is important to put quality in mind. By quality, I mean you need to ensure it is balanced. You should ensure that you include different food classes as mentioned in Chapter 1.

Appendix B has a list of the serving sizes of different foods and the calories they contain. However, I will give some examples below.

## STARCH

A serving of starch has 80 calories, examples include: $1 / 3$ cup of cooked white or brown rice or pasta, 1 slice white bread, 2 slices of whole wheat bread*, $3 / 4$ cup regular cereal, 75 g sweet potato (see picture in appendix c), 50 g plantain (half of a small one) and so on.

A serving of beans and peas and lentils have 125 calories, examples include: $1 / 3$ cup baked beans, $1 / 2$ cup cooked beans (black, pinto, kidney, lima or white beans), $1 / 2$ cup green peas.

You will notice that the calories in a serving of beans and peas are more than that in starch, 125 calories versus 80 calories, this is because beans contain both starch and protein. Please bear the calories in mind when counting. 3 servings of starch, which is about 240 calories is equivalent to 2 servings of beans, about 250 calories.
> * Please note that most wheat bread sold in Nigeria are not $100 \%$ whole grain wheat. Most of them contain some whole grain mixed with regular brown flour. So I personally advise that you treat them like white bread, even though they do contain a little less calories and more fiber than white bread.

One way to ensure it's indeed whole grain, the first ingredient on the ingredient list must be "Whole grain wheat flour"

## MEAT AND OTHER PROTEINS

Proteins will be divided into three sections based on the amount of fat they have.

Lean Selection ( $0-3 \mathrm{~g}$ fat/serving), a serving has 45 calories, examples include: 2 egg whites, 28 g of beef (sirloin, steak, tenderloin or roasted), 28 g fish (catfish, cod, croaker, tilapia, tuna), 28 g skinless poultry (chicken, duck, turkey well drained of fat), 28 g of prawns or shrimps, 28 g cheese with $0-3 \mathrm{~g}$ fat $/ 28 \mathrm{~g}$.

Medium fat Selection ( $4-7 \mathrm{~g}$ fat/serving), a serving has 75 calories, examples include: 1 whole egg, 28 g beef (corned beef, ground beef ), 28 g of fried fish, 28 g chicken with skin, 28 g fried chicken, 28 ground turkey, 28 g cheese with $4-7 \mathrm{~g}$ fat/28g.

High fat selection ( $\geq 8 \mathrm{~g}$ fat/serving), a serving has 100 calories, examples include: 2 slices of pork bacon, 3 slices of turkey bacon, 1 hotdog (beef, pork, turkey or chicken).

## MILK AND YOGHURT

This will be also divided into three sections based on the amount of fat they have.

Fat-free (Skimmed) and Low fat (1\%) selections, a serving has 100 calories, examples include: 1 cup fat-free liquid milk, 1 cup $1 \%$ milk, $1 / 3$ cup skimmed powdered milk, $2 / 3$ cup fat-free yoghurt flavoured with artificial sweetener.

Reduced-fat selections, a serving has 120 calories, examples include: 1 cup $2 \%$ liquid milk, $2 / 3$ cup low fat plain yoghurt

Whole milk selections, a serving has 160 calories, examples include: 1 cup liquid whole milk, $1 / 3$ cup powdered whole milk, $2 / 3$ cup plain yoghurt made with whole milk, 1 cup soy milk

## FRUIT AND FRUIT JUICES

One serving of fruit contains 60 calories, examples include: 1 small apple, 1 small pear, $1 / 2$ large banana or 1 small one, 17 seedless grapes, 1 small orange, 1 cup watermelon cubes, 1 cup pawpaw cubes

One serving of fruit juice contains 60 calories, examples include: $1 / 3$ cup grape juice, $1 / 2$ cup apple, grapefruit, orange or pineapple juice, $1 / 3$ cup mixed fruit juice.

## FATS

Fats are categorized based on the type of fat they contain.

Mono-unsaturated fats, one serving contains 45 calories, examples include: 28 g of avocado, $11 / 2$ teaspoon peanut butter, 6 almonds nuts, 6 cashew nuts, 10 groundnuts, 1 teaspoon olive oil, canola oil or groundnut oil.

Poly-unsaturated fats, one serving contains 45 calories, examples include: 2 tablespoons reduced-fat mayonnaise, 1 tablespoon regular mayonnaise, 1 teaspoon soybean or sunflower oil, 1 tablespoon regular salad dressing, 2 tablespoons low fat salad dressing.

Saturated fat (limit use), one serving contains 45 calories, examples include: 1 teaspoon butter, $1^{112}$ tablespoon regular coconut milk, 1 teaspoon coconut oil or palm oil.

When splitting the calories into the different food groups as I will show below, make sure not more than $50 \%$ of the calories go towards starch; this means that if you were to have a 400 calorie meal, not more than 200 calories should come from the starch you are eating.

Using the calorie information above, a 400 calorie breakfast might include:

+ 2 slices of wheat bread 160 calories
- Fried egg that consists of:
- A whole egg
- 1 egg white
- 10 mls of oil
- 1 cup of Veggies*
+ 1 small apple
+ Total

75 calories
20 calories
90 calories
25 calories
60 Cal
430 Cal

* Veggies: a variety of vegetables you might like, tomatoes, onions, carrots, green beans and so on

It is not realistic to try to get exact numbers, just try to get an approximate of your daily target. So for example, Mr. Ben may have 1450Cal and then 1530 Cal on another day. These small variations are fine.

When bringing a meal together, here are some rules you should try to follow:

- Try to make room for dairy at least once a day.
- You should have at least 2 servings of fruit and 3 servings of vegetables daily.
- If you are diabetic ensure you don't have more than 3 servings of starch at a time, for example, 1 cup of cooked rice (remember a serving is $1 / 3$ cup).


Rice with efo-Riro, boiled egG \& banana

## DETAILS

+ 240 calories of starch (1 cup of cooked rice)
+ 75 calories of protein ( 1 whole egg)
+ 60 calories of fruit ( 1 medium banana)
+ 45 calories of fat ( 5 mls of palm oil in efo-riro)
+ 40 calories (approx.) of vegetables (ugwu leaves, tomatoes, red pepper, onions)

Total: 434 Calories


## DETAILS

+ 270 calories of starch ( 250 cal from 1 cup of boiled beans and 20 cal from approx. $1 / 8$ cup of sweet corn)
- 100 calories of protein ( 56 g of titus fish)
- 35 calories (approx.) of vegetables (1 cup mixed veggies- carrots, green pepper, red pepper, onions)
- 45 calories of fat ( 5 ml of sunflower oil)


## Total: 450 calories



## Garri with grilled chicken and veggies

## DETAILS

+ 240 calories of starch (3/8 cups of garri)
+ 195 calories of protein ( 150 g of raw chicken)
+ 40 calories (approx.) of vegetables (carrots, green pepper, red pepper, onions)


## Total: 475 CALORIES



Chicken salad with banana

## DETAILS

+ 80 calories of starch ( $1 / 2$ cup sweet corn)
+ 190 calories of protein ( 150 g raw skinless chicken breast)
+ 60 calories of fruit ( 1 medium banana)
+ 60 calories (approx.) of vegetables ( 2 cups- cabbage, carrots, lettuce)
- 45 calories of fat (2 tablespoons of low fat mayonnaise)


## TOTAL: 435 CALORIES

Fish sauce Recipe ( 3 servings, 1 servings is 200cal)

+ Remove the bones in boiled or smoked titus fish, 170 g or N 400 worth and shred into small pieces.
+ Rough blend some pepper, tomatoes and pepper and chop about 3 cups of veggies such as carrots, green pepper, tomatoes, onions and add $1 / 3$ cup of sweet corn.
+ Heat 15 ml (one tablespoon) of oil, in a pan and add onions. Heat till onions are transparent looking.
+ Add some of the rough blended pepper, and heat for about a minute on low to medium fire.
+ Add seasoning cube to taste, curry and thyme, then pour in fish, stir it in.
+ Add all the veggies and sweet corn and then allow to heat on low for about 5 minutes or till ready.
+ Split content of the pan into 3 equal servings and store in fridge.


## Cbapter 4

## Time to Eat

Try to eat breakfast within an hour of waking up to get you started with your day. However, some of us seem to be fine with just a cup of tea or coffee and this is fine. You can eat once you feel up to it. It is important you do not wait till you are starving, as there is a tendency for you to overeat.

Drink water through the day, listen to your body and don't wait till you are very thirsty. Drink water at the first little sign of thirst as it helps to keep you focused and keeps your head clear. You'll be surprised how much not drinking water can affect the way you feel. Thirst can cause you to have a headache, become irritable and fatigued, and you might not realise all you need is some water.

If you eat breakfast early you might get hungry before lunch, so you can have a mid-morning snack about 3 hours after breakfast. Lunch should be eaten before you get too hungry, same with breakfast. Excess hunger can cause an unnecessary appetite especially for junk food, and unfortunately, you'll justify overeating by telling yourself how hungry you were.

Dinner should be eaten at least 2 hours before bed; as it takes about that long for solid foods to digest. This helps to avoid indigestion and reflux. However you can have something light like fruit juice or fruits like watermelon closer to bedtime for times you are up late. The secret to avoiding late night snacking is to go the bed early. This is not possible all the time, but as much as possible, go to bed early and save yourself the battle of fighting the temptations in your fridge. I am hoping you can appreciate the importance of keeping healthy foods in your fridge, so even if you find yourself opening it, you'll be faced with only healthy choices.

## Chapter 5

## Nutrition Labels

Nutrition labels are those tables, you find on packaged foods. The heading of the table usually reads Nutrition Facts or Nutrition Information. It is important that you understand them and know how to interpret them and know how to make healthier decisions when you go shopping.

Don't rely on the health claims you read on food packaging. Instead, learn a few simple label reading tips to choose healthy foods and drinks for yourself.

## STEP 1: DECIDE WHAT BRAND OR VARIETY TO BUY

When we go shopping, we are often faced with a wide variety of the same or similar products. So the question is, which do you pick, and what should inform that decision.

The first factor that should be deliberated on should be the nutrition value, before taste or price. The things to look out for when picking between brands include:

- Sugars- go for less
+ Fats- go for less total fat, and more importantly choose brands with less saturated fat and more unsaturated fats. Some labels write only the saturated fat. The unsaturated fat is the difference between the total fat and saturated fat. Go for as less trans-fat as possible, the closer to zero the better.
- Fiber- go for more.
+ Sodium- go for less.
Serving size indicated
is the manufacture's
recommendations, but you
should determine yours
based on your needs.
Use the 100 g column on
the pack of different brands
to compare the nutrients in
them.
Avoiding sugars completely
is not necessary, but try to
avoid larger amounts of added
sugars. Choose less than 15 g
per 100 g .
Other names for added sugar:
Dextrose, fructose, glucose,
golden syrup, honey, maple
syrup, sucrose, malt, maltose,
lactose, brown sugar, sucrose
Choose lower sodium options
among similar foods. Less
than 400 mg per 100 g is good,
but less than 120 mg is best.

| Nutrition Facts |  |  |
| :---: | :---: | :---: |
| Servings per package - 16 <br> Serving Size- 30 g ( $2 / 3$ cup) |  |  |
|  | Per serve | Per 100g |
| Energy | 432kJ | 1441 kJ |
| Protein | 2.8 g | 9.3 g |
| Fat |  |  |
| Total | 0.4 g | 1.2 g |
| Saturated | 0.1 g | 0.3 g |
| Carbohydrate |  |  |
| Total | 18.9 g | 62.9 |
| Sugars | 3.5 g | 11.8 g |
| Fiber | 6.4 g | 21.2 g |
| Sodium | 65 mg | 215 mg |
| Ingredients: Cereals (76\%) (wheat, oatbran, barley), psyllium husk (11\%), sugar, rice, malt extract, honey, salt, vitamins. |  |  |

Total Fat - Generally pick
foods with less than 10 g per
100 g
For milk, yoghurt and
icecream, choose less than 2 g
per 100 g
For cheese, choose less than
15 g per 100 g
Saturated Fat- Aim for the
lowest per 100 g .
Less than 3 g per 100 g is best.
Other names for ingredients
high in saturated fat: Animal
fat/oil, beef fat, butter, milk
solids, coconut, coconut milk/
oil/cream, copha, cream, palm
oil, sour cream, vegetable
shortening.
Not all labels include fiber.
Choose breads and cereals
with 3 g or more serving.

The energy column shows the total amount of energy from the food item per serving or per 100 g , in calories or kilojoules. It is the total amount of energy derived from all the components of the item, including carbohydrates, proteins and fats.
N.B- To convert kilojoules to calories: $1 \mathrm{cal}=\mathrm{KJ} \div 4.2$

## STEP 2: DETERMINE HOW MUCH YOU SHOULD EAT (ESPECIALLY FOR ITEMS YOU CAN'T FIND IN YOUR FOOD EXCHANGE LIST)

After buying, determine how much you should eat to derive the right portions of carbohydrates, protein or fat you need, according to the plan you've made. The food exchange list has helped a lot with portions, but you would notice you can't find everything there, and the truth is, brands do vary.
To do this, you should know what class of food the food item falls, so you know the part of the nutrition label you are going to use in calculating portion size. For example, for cereal your focus would be on the carbohydrate content, for a tin of fish, it will be protein, and for salad cream, it will be fat. You would need the following information to determine your portions.

15 g of carbohydrate $=1$ portion of carbohydrate
7 g of protein $=1$ portion of protein
5 g of fat $=1$ portion of fat

Using the example of the food label above, 100 g of the cereal will give 62.9 g of total carbohydrate.

Assuming according to your meal plan, you should have 2 portions of carbohydrate for breakfast, which is 30 g of carbohydrate (since 1 portion is 15 g )

All you need do is a simple calculation. If 62.9 g of carbohydrate $=100 \mathrm{~g}$ cereal Then, 30 g of carbohydrate $=? \mathrm{~g}$

The amount of cereal that will be equivalent to 30 g of carbohydrate would be 47.7 g , approximately 48 g . you can then measure this amount using a food scale.

If you don't like the idea of weighing, transfer this amount into your measuring cups and see which one fits. You might need to combine cups, for example, if it is more than a full cup, the rest would go into a smaller cup. Now that you know how cups it is equivalent to, you wouldn't need to weigh next time.
This process would be necessary mainly for foods that don't appear in the Food Exchange List (Appendix B)

You should also note that,
1 g of carbohydrate gives 4 calories, so a portion of carbohydrate which is 15 g , would give 60 calories of energy.
1 g of protein gives 4 calories as well
1 g of fat gives 9 calories
From the above, you can see that fat provides more than double the amount of energy per gram, as carbohydrate and protein. This is partly why they are taken in smaller quantities, compared to other food classes.

## COMPARING LABELS

Below is an example of two different brands

| A | Per iong | B | Per IOOG |
| :--- | :--- | :--- | :--- |
| Total fat | 1.2 g | Total fat | 3 g |
| Saturates | 0.4 g | Saturates | 2 g |
| Total Carbohydrate | 62.9 g | Total Carbohydrate | 60 g |
| Sugars | 11.8 g | Sugars | 10.5 g |
| Sodium | 215 mg | Sodium | 200 mg |

Looking at the above brands, comparing the fat content, brand A has less fat and more importantly less saturated fat, however, it has more sugar and sodium. Which do we pick?

We pick brand A. Despite the higher sugar and sodium, the difference is not as significant as the difference in fat. So for these two brands, we are selecting based on fat content, as the effect of the difference is more harmful than the difference in the amount of sugar and sodium.

## Cbapter 6

## Cooking Methods

Try to reduce the amount of frying that you do to reduce your intake of fat in general. Do more of boiling, grilling, steaming, stir-frying and roasting. I believe you are familiar with these cooking methods, except stir-frying may be. Stir-frying is when you use minimal amount of oil to fry ingredients, while constantly stirring the ingredients. It is used a lot for cooking vegetables, as it helps preserve the precious nutrients in them. It is also used to cook poultry and seafood.

Use cuts of red meat and pork labelled "loin" and "round", as they usually have the least fat.

With poultry, use more of the leaner light meat (breasts) instead of the fattier dark meat (legs and thighs), and be sure to remove the skin some of the time. We've learnt about how to choose healthier oils (Chapter 1, under selecting foods), now we need to learn how to stick to quantities that'll help us achieve our health and weight goals. The fact that you are using a healthy oil, does not mean you can drizzle as much you like. So you've picked yourself a healthy oil, GREAT!!! But it is still oil, and still has 45 calories in each teaspoon ( 5 mls ), not tablespoon, teaspoon!!! So while you need healthy fats and oils to stay healthy, you want to keep it to just amounts you need. The following tips will help you stay on track.


Measure the oil: Now this may sound very obvious but many of us don't, we just pour from the container into the pot or pan. If your bottle of oil is a very large one, I advise transferring into a smaller container first.

It is easier to measure into a spoon from a smaller container. If you are cooking for one person, try to stick to 1-2 teaspoons of oil.

Use non-stick pans: As the name says, they prevent your food from sticking. A common reason for using more oil when frying is when your food starts sticking.

A good way to avoid the need for more oil is to use the non-stick pans, so you can stick to the initial amount of oil you intended to use.


Try an oil spray: If measuring the oil sounds like stress to you, you can try buying oils in spray cans. They are great for two reasons:

Firstly, it's easy to measure the quantity of oil by just counting how many times you spray, secondly, it's easier to cover the entire pan with the oil, as you can target different areas of the pan and each spray can cover a reasonable area. To determine how many sprays to use, check the can for the volume of oil that comes out with each spray, and do a little math. So for example, if each spray is 1 ml , you'll need to spray 5 times to get 5 mls .

Use a little bit of water: If the urge comes to add more oil to a dish you are preparing, either to prevent sticking or for moisture, try adding a little bit of water instead.


## Cbapter 7

## Tips For Eating Healthy \& Sticking To It

## 1) CREATE A SHOPPING LIST:

One of the easiest ways to get off track is when you don't have the necessary ingredients you need to make your meal. To minimize the possibilities of this happening, using your meal plan, create a list of the ingredients you would need and the amount for the week; you can then shop over the weekend.

Of course you can decide the duration for which you want to shop, do what's convenient for you, but remember to consider how long they can last, so you don't lose money to spoilage. Based on your list you can determine what you already have and what needs to be purchased.

Using Mr. Ben's meal plan, his shopping list would look like this for one week.

| $\mathrm{S} / \mathrm{N}$ | ITEM | $\mathrm{S} / \mathrm{N}$ | ITEM |
| :--- | :--- | :--- | :--- |
| 1 | Bread | 15 | Oranges |
| 2 | Skimmed milk | 16 | Apples |
| 3 | Sweet Potatoes | 17 | Bananas |
| 4 | Rice | 18 | Cabbage |
| 5 | Pasta (spaghetti, macaroni) | 19 | Carrot |
| 6 | Plantain | 20 | Green pepper |
| 7 | Eko | 21 | Green beans |
| 8 | Low fat yoghurt | 22 | Green peas |
| 9 | Low fat salad dressing | 23 | Tomatoes |
| 10 | Eggs | 24 | Pepper |
| 11 | Fish | 26 | Onions |
| 12 | Chicken | 27 | Sweeteners |
| 13 | Canned Tuna or Salmon fish |  |  |
| 14 | Grapes |  |  |

2) PLAN MEALS AHEAD:

Now depending on what your schedule is like, if you are the very busy type who wakes up early and gets home late, it is advisable you make as many parts of your meal as you can over the weekend.
To make things easier, you can pick two meals for breakfast, lunch and dinner, that you will alternate during the week, prepare them and store in your fridge. Assuming Mr. Ben is a very busy man, he can decide to pick his meals for Monday and Tuesday on his timetable above and alternate it throughout the week. Such that he eats his Monday meals on Monday, Wednesday and Friday, and Tuesday meal on Tuesday, Thursday and Saturday.

For example, who don't have extreme schedules, and have time to prepare meals during the week, there are still plans you can make preparing meals quicker and easier. Based on your meal plan, you can chop or shred vegetables
and cook the protein you would be needing to prepare your meals during the week and refrigerate.

You can also make plans for the next day the night before, for example, you can peel your sweet potatoes or yam the night before, soak in water and refrigerate; this would save you time in the morning.

## 3) HAVE A MEAL BUDDY:

As humans it easier to stick with new habits when you have someone else on the journey with you. Your buddy can help out with the meal preparations and also help you stay on track. Try to get, your spouse and/ or children to join you on this healthy eating journey to a better health and life.

## 4) HAVE CHEAT DAYS:

So that you don't feel overwhelmed and feel like you are being "punished", especially when you just start, it's advisable that you pick a day in the week where you can relax on your diet a little. A cheat day for you could be having a little ice-cream, eating some chocolate or even having more portions of some delicious pasta.

However, it is important that you do this with moderation. With time, as you grow into your new healthy diet, you'll realize you are no longer counting down to cheat day, and eventually, you would be able to incorporate some "junk food" into your diet, without jeopardizing your efforts. Your health provider would be of great help in helping you ease into your new lifestyle.

## 5) LABEL CLAIMS:

You need to be generally careful when you see Label claims such as "sugar-free", "low calorie", "low fat", "suitable for diabetes" and so on. Now that you know how to interpret nutrition labels, check the content to know what it really contains.

The fact that it says "No sugar" doesn't mean it can't contain other sugar substances like those stated in the image of the nutrition label above. These sugar substitutes could still add to the amount of carbohydrate you are taking, so even though the sugar might be zero, the total carbohydrate level could be high. Always remember to read labels, to guide your choices and determine how much you can consume, before purchasing.

## 6) EATING OUT:

This happens to be one of the biggest challenges you would face when adapting to a healthy eating habit. While I will encourage you to eat more of homemade meals as much as possible, it is almost impossible that you would eat at a restaurant, at a party and so on, once in a while.

The common problem with eating out is the fact that the meals tend to contain a lot of calories from fat, a lot of salt and the portions are much larger than you need.

So when you find yourself in these situations, here are a few tips that can keep you as close to an ideal meal as possible:

+ Let a vegetable option be the first thing you look out for. Be it a salad, vegetable soup like efo-riro, okra and so on. Please help yourself to plenty of it. If it's a restaurant and the portion size is small, order for more than one portion.
- If it is a salad, ask if there's a salad that has not been dressed, so that way you can control the amount of cream that goes in there. However, many times you won't have that luxury, that is, the salad has been premixed with the cream. If it's a lot of cream, you are probably better off with just a portion, so you don't load yourself with the calories in the cream
- If it's a soup, ask that they drain out as much oil as they can before putting it on your plate.
+ Next, select a protein. Eggs, fish, chicken, gizzard, snails and so on, look at your options. Look out for options that are NOT fried, that is, select a protein that is either grilled, boiled, smokes or roasted. For chicken, you can reduce the number of calories by removing the skin.
- For chicken, I've noticed many restaurants serve a quarter chicken, that's an entire lap for example. That is more protein than you probably need, especially if you still intend to add a source of carbohydrate to that meal. An ideal size would be half of that. Something like the pieces they sell at KFC. So my dear, you might have to keep the remaining half for some other time.
- Now the starch, rice, spaghetti, eba, pounded yam, whatever it is, should be a small quantity. Most restaurants would sell you more than you need, so ask if they sell half portions. If they do, great! If they don't, you have two options. I think the first is easier than the other.
- First option: Ask for a takeaway pack with your meal. Remember that chicken you halved, throw in the other half in the pack, do the same for the excess starch. To have an idea of how much starch you should be having, use the plate method (discussed in Chapter 3), that is, only a quarter of your plate should be filled with starch.
- Second option: You only eat the amount that's healthy as I stated above, and leave the rest on the plate. But trust me, it is very difficult to stop eating food that's right there in front of you. I feel you'll be doing yourself a favour by putting the excess away in a pack.
- Now finally we get to the drinks! Of course my first option would be water, but if you'd like something more sweet or fizzy, try a diet coke, Pepsi, cream soda and so on. Try to avoid sugary drinks and juices.
+ Please be careful with juice, even the no sugar ones. Fruits contain sugars of their own, so when it's squeezed into a juice, you are taking a lot of fruit in a small amount. A serving of juice is about half a cup! That quantity is equivalent to the amount of sugar in a small orange or small apple for example. Since the volume is small, you can dilute with water for more volume.

I really do hope you find this useful. It's not going to be easy defeating temptation staring right in the face, but it is worth it. The more you fight the temptation to overeat and win, the easier it gets to win next time.

## Chapter 8

## ExERCISE

Finally, we will be talking about physical activity. You probably already know it is important to exercise, but yet most people don't. Reasons vary from lack of time to finding it boring or just being uninterested. However, I have good news for you, with proper planning, you can find it easier to set up an exercise plan, stick to it and even have fun doing it!

## * BENEFITS OF EXERCISING *

- Lower both your systolic and diastolic blood pressure (i.e. the upper and lower numbers that make up your BP) by strengthening your heart muscles.
+ It also improves your cardiovascular health, reducing the risk of heart disease. ${ }^{35}$
- Lower your blood glucose, by helping you use up the glucose in your blood and reducing your resistance to insulin, that is, it improves the transportation of glucose from your blood to your muscles and fat cells for storage. ${ }^{36}$
- It raises your healthy cholesterol (HDL) and reduces your unhealthy cholesterol (LDL) and triglycerides.
- It mobilizes belly fat, reducing your risk of developing diabetes and heart disease if you aren't managing either at the moment. ${ }^{37}$
- It augments your weight reduction diet.
- Regular exercise also lowers your risk of a number of cancers, depression and anxiety
- It also improves your mood and energy levels. ${ }^{38}$


## * WHAT KIND OF EXERCISE IS BEST FOR ME? *

To get the most benefits from your exercise as stated above, you need a wellbalanced exercise regimen, which should include aerobic activity, strength training and stretching.

## AEROBIC EXERCISE

Also known as, endurance exercise or cardiovascular exercise (cardio). These are activities that increase your heart rate, examples include, brisk walking, jogging or running, swimming, jump rope, cycling and so on. You should try to do this most days of the week. ${ }^{39}$

## STRENGTH TRAINING

Strength training also known as resistance exercising, helps you build muscle that boosts your metabolism, helping you lose excess weight or maintain a healthy weight. You can do this with or without hand weights, two or three times weekly ${ }^{39}$. Strength exercises that don't require weights include squats, press-ups, lunges, sit-ups, planks, heel raises, and many more.

## STRETCHING EXERCISES

You should do this before and after each exercise routine, to reduce soreness and possibility of strains. It can also reduce the pain of arthritis and prevents falls.

## ADD EXTRA ACTIVITY TO YOU DAILY ROUTINE

Here are some simple ways to increase your level of activity during your routine daily activities

- Walk around while you answer the phone.
- Do house chores
- Park a little farther from the entrances where ever you go.
- Take the stairs rather than the elevator if you are going up one or two flights.
- Carry groceries or whatever items from the car one package at a time.
- Don't stockpile things that need to be taken upstairs at home, go upstairs every time you need to get something up there.


## * IS EXERCISING SAFE? *

Check in with your healthcare provider first if you are not already active. This is to ensure you are already for exercise and to set limits for you. Since an active lifestyle will greatly benefit you, your healthcare provider will likely be all for it. If you are diabetic,

+ Check your blood glucose before exercising. It should be above about $100 \mathrm{mg} / \mathrm{dL}(5.5 \mathrm{mmol} / \mathrm{L})$, if not take a snack, like 2 slices of bread or two small apples. Do not exercise if it is above $240 \mathrm{mg} / \mathrm{dL}(13.3 \mathrm{mmol} / \mathrm{L})$, as exercising can worsen the hyperglycaemia.
- Check your blood glucose after eating, to see if it is below $70 \mathrm{mg} / \mathrm{dL}$ $(3.9 \mathrm{mmol} / \mathrm{L})$. If it is, it is too low (hypoglycaemia). Treat it with 15 g of carbohydrates, such as a spoonful of glucose powder, one small apple, a cup of milk or about a third of a 50 cL bottle of coke. Check after 15 minutes, if it's still too low, repeat treatment.
- If you use insulin, exercise would affect when and how much insulin you will take. This will be determined by your healthcare provider. 40
- If you are hypertensive, you also need to check your blood sugar before and after exercising, especially when you just start, to see how exercise affects your BP. Your healthcare provider will set limits for your maximum blood pressure before and after you exercise. This is especially important with the strength training, as they tend to increase your blood pressure.

Finally, make sure you wear comfortable shoes and stay hydrated, by drinking lots of water, before, during and after your exercise.

## * HOW TO PREPARE AN EXERCISE PLAN *

When it comes to exercising, you need to think of it in terms of frequency (how many times a week), intensity (difficulty) and duration (how long). You should also specify time and place.

When exercising, you should start with a warm-up, to get your body ready for more intense aerobic exercise. Warm up exercises can include, stretching exercises like stretching your arms, waist, thigh, back, calf and so on jogging on the spot. Do this 5-10 minutes.

Aerobic exercise should be at least 30 minutes (duration) of moderate exercise (intensity), at least 5 times a week (frequency). Examples of moderate exercise include brisk walking, swimming and bicycling. You can break up your 30 minutes to three 10 minute sessions if you don't have time to do it all at once. If you are short on time, you can do vigorous exercise, like jogging, running or jump rope, 20 minutes, 3-4 times weekly. This would give the same benefit as the earlier option. ${ }^{39} 2$ minutes of moderate exercise equals 1 minute of vigorous exercise.

If you are not active today, gradually work up to the above amounts of exercise. If it takes you a few weeks to get there, that's absolutely fine. Do not overdo it, you might end up hurting yourself, and discourage future efforts.

Strength exercise should be done at least two times a week, with at least one day apart. Try to work all major muscle groups (legs, hips, back, abdomen, chest, shoulder and arms). Do 8-12 repetitions per activity that counts as 1 set 39 . To benefit more, do 2 or 3 sets.

Lastly, you need to cool down, after every exercise session. When exercising, don't just stop, you need to slow down gradually and finally stretch. This would help reduce muscle soreness from your exercise.

## * HOW TO STICK TO YOUR PLAN *

If you really want to reap the benefits of exercising, it takes continuous efforts to make it part of your daily routine. Like anything else in your life, it takes planning. Here are tips to help you stay on track-

+ Get ready with all the things you might require, exercise clothes, shoes, exercise mat, and some equipment. The equipment you invest in would be dependent on your budget. If you have a relaxed budget, you can consider purchasing a treadmill or elliptical bike. Some inexpensive equipment, include jump rope and dumbbells.
+ Do exercises you enjoy. This would increase your chances of getting it done. If you can't find anything that you enjoy, pair it with another activity to keep you interested. For example, you could listen to music, or watch your favourite television show while you exercise. This would help the time pass by more quickly.
- Always have a back-up plan for your plan. If you plan to jog around your neighbourhood, have another plan for when it rains for example. If you plan to use a treadmill and electricity goes out, have another exercise plan that doesn't require the machine, like jump rope or jogging.
- Decide if you would prefer exercising at home or the gym. Some people prefer home, because they don't have to drive anywhere, or pack a gym bag; while some prefer the gym, because they feel compelled to utilize the money paid, thereby motivating them to go.
+ Determine when you find it easiest to exercise. Some people prefer first thing in the morning, so unexpected events during the day can't get in their way. But the truth is, for some, waking up a little earlier isn't so practical, especially if you already wake up really early. If this is the case, you can work out immediately after work, before you start the other things you need to get done, or before bed. You might need to try different times, to find which is the easiest for you to follow.
- If you would prefer to exercise with someone, find an exercise buddy, this could be your spouse, child or nearby neighbour. They can help keep you company and accountable.
- If you still find it hard exercising, you might require a personal trainer either at a club, gym or at home.

Below is an example of what your exercise plan could look like,

| WARM Up |  | Dars: Everr Time <br> YOU ExERCISE |  |
| :--- | :--- | :--- | :--- |
| Activity | REPS | SETS | NOTES |
| Arm circles, self-hugs, <br> trunk bends, touch your <br> opposite toes | 10 | 2 |  |


| AEROBICS |  |  | Dars: MON, TUE, <br> ThUR, SAT, SUN |
| :--- | :--- | :--- | :--- |
| Activity | Dist/ DUR/ <br> SETS | INTENSITY | NOTES |
| Walking Or | From home to <br> the estate gate <br> and back home | Easy (Normal <br> walking pace) | Increase your <br> walking speed and <br> distance as you gain <br> endurance |
| Treadmill Or | 15 min | Walking speed | Increase speed and <br> duration weekly |
| Jumping jacks | 150 sets | - | Increase number by <br> 20 weekly |


| Strength Exercises |  |  | Days: Tue, Thurs |
| :---: | :---: | :---: | :---: |
| Activity | Reps | SETS | Notes |
| Squats, Wall press ups, Bicep curls, Sideways Leg raises, Sit-ups | 10 of each | 1 | Increase sets, as your endurance increases |
| Treadmill Or | 15 min | Walking speed | Increase speed and duration weekly |
| Jumping jacks | 150 sets | - | Increase number by 20 weekly |


| COOL DOWN |  | Dars: EVERYTIME <br> YOU EXERCISE |  |
| :--- | :--- | :--- | :--- |
| ACTIVITY | REPS | SETS | NOTES |
| Stretch your chest, upper <br> back, lower back, thigh, <br> trunk, calf, waist | Hold for 10 <br> seconds each | 1 |  |
| Treadmill or | 15 Min | Walking speed | Increase speed and <br> duration weekly |
| Jumping jacks | 150 Sets | - | Increase number by <br> 20 weekly |

## Cbapter 9

## Common Mrths and

## Misconceptions

## 1) MYTH: <br> IF IT'S WHOLE WHEAT OR WHOLE GRAIN I CAN EAT AS MUCH AS I WANT



Fact: The calories are often times very similar, with very small differences between whole grain and the counterparts that have part of the grain removed. As with whole wheat bread versus white bread, brown rice versus white rice and so on. The major benefit of choosing whole grain is not in calorie savings but rather in the higher amount of fiber and nutrients.

The fiber makes you feel fuller helping you eat less, helps improve your digestive health and reduces the rate at which glucose is released from your meals, helping to control and stabilize your blood sugar levels. The process of removing parts of the grain and polishing them in refined grain, causes them to lose a significant amount of the vitamins and minerals in them.
2) MYTH:

CARBOHYDRATES MAKE ME FAT


Fact: It is not carbohydrate that makes you
fat, it is when you eat more calories than your body needs that you gain weight. The calories can come from any of the food groups, so carbohydrates are not the enemy.

As discussed in the book, you want to moderate the quantity of carbs you consume because they can be high in calories and can cause your blood sugar to shoot up too high if you take too much, especially if you are diabetic.

## 3) MYTH: <br> FAT MAKES ME FAT



Fact: This is similar to the above myth. Fat doesn't enter your boay ana get stored as fat, so long as it's taken within the limits of your calorie allowance. If you take too many calories in general, the excess energy gets stored, it doesn't necessarily have to be from only the fats you ate, all the other food groups will contribute to the excess energy being stored as fat.

However, you want to moderate the quantities for reasons already explained earlier in the book.

## 4) MYTH: HONEY IS NATURAL SO IT DOESN'T HAVE CALORIES



Fact: Honey mostly contains natural sugars called fructose and glucose. This means that it has calories! One teaspoon of honey has 21 calories, a teaspoon of sugar has 16 calories while a cube of sugar has 15 calories. So you can see, honey doesn't give you the excuse to drizzle it as you like.

However, the advantage honey has over sugar is that, while sugar offers you just calories (hence the name empty calories), honey is rich in antioxidants and has small amounts of vitamins and minerals.

## 5) MYTH: <br> FRUITS DON'T HAVE CALORIES, SO I CAN EAT A LOT

Fact: Just as explained above, natural does not mean "zero calories". If you would look at the food exchange list, you would notice that a serving of fruit has 60 calories and 15 g of sugar, equivalent to 4 cubes of sugar.

However, they are also rich in fiber and so many nutrients, this is why we encourage you to eat them, but don't eat so many thinking they are free of calories.
6) MYTH:

FRUIT JUICE IS HEALTHY SO I CAN DRINK IT INSTEAD OF WATER

Fact: If fruits contain sugars and therefore calories, it is no surprise that their juices will too. Half a cup of juice with no added sugar has 60 calories.

Trust me, it is a small amount, which is why most times we drink more than that not realizing how many calories we are consuming in the name of "healthier choice". I advise adding ice and water to increase the volume of the juice, rather than having more juice.
7) MYTH:

I CAN EAT ANYTHING I LIKE, SO LONG AS I EXERCISE

Fact: You can't out-exercise a bad diet. Weight loss is $80 \%$ diet and $20 \%$ exercise. The amount of exercise required to burn off the calories in a bad diet is ridiculous and you just can't do it.


So, while exercise can help you lose more weight than if you used only diet, exercise alone would result in frustration due to lack of results.
8) MYTH:

EGGS ARE BAD FOR ME

Fact: There was some truth to this, based on the eviaence availade at tne time. The issue with eggs was the cholesterol present in the yolk, however, new evidence shows that cholesterol found in food doesn't increase that found in your blood.

It is saturated fat that increases bad cholesterol, while unsaturated fats reduce them; and guess what, eggs are rich in unsaturated fats. Just makes sure you are eating them within your calorie limits. Please see the chapter on selecting foods for more.

## 9) MYTH:

## I CAN CHOOSE WHERE I BURN FAT

Fact: Many of us wish to lose weight only in a certain area, like our bellies, arms, thighs and so on. Unfortunately, this is just not possible. Your body chooses where it wants to burn fat. There's no food or special diet, don't let anyone tell you otherwise.


You can work towards losing weight in a particular area, but don't $t$ be surprised when you start losing weight in other places as well. What you can control is the toning of the muscles, you can strengthen the muscles in a particular area by doing exercises that work those particular muscles.

## 10) MYTH: <br> TO FLATTEN MY BELLY I NEED TO DO PLENTY TUMMY EXERCISES

Fact: You need to eat right first. The way our body is built, you have muscles covered by fat, which is then covered by your skin. You need to burn the excess layer of fat on top of the muscles before the muscles under can become obvious.

To burn fat optimally you need the right diet and aerobic exercises. Aerobic exercises help you burn calories and speed up the fat burning process alongside your diet. The tummy exercises help you tighten and strengthen the muscles, making them more obvious. In summary, tummy exercises are the last things you should consider when you are trying to work on your belly, rather think in this order, diet, aerobic exercises then tummy exercises.
11) MYTH:

I HAVE TO WORK OUT IN THE MORNING

Fact: It does not matter when you exercise, so long as you get it done you'll burn calories. Pick a time that is realistic for you and do it!



## 12) MYTH:

I SHOULD NOT EAT PAST 7PM

Fact: Do not have any heavy meals $2-3$ hours before going to bed. This is to prevent, undigested food from climbing back up into your gut and causing a heartburn
 and other gastrointestinal symptoms.

## Appendices

## Appendix A

| Calories | Starch PORTIONS | Fruit Portions | Milk Portions | Vegetable Portions | Meat and Protein Portions | Fat Portions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1200 | 5 | 3 | 2 | 2 | 4 | 3 |
| 1300 | 6 | 3 | 2 | 2 | 4 | 3 |
| 1400 | 6 | 3 | 2 | 2 | 5 | 4 |
| 1500 | 7 | 3 | 2 | 3 | 5 | 4 |
| 1600 | 7 | 3 | 3 | 3 | 5 | 4 |
| 1700 | 8 | 3 | 3 | 3 | 5 | 5 |
| 1800 | 8 | 3 | 3 | 4 | 6 | 5 |
| 1900 | 9 | 3 | 3 | 4 | 6 | 5 |
| 2000 | 9 | 4 | 3 | 5 | 6 | 6 |
| 2100 | 10 | 4 | 3 | 5 | 6 | 6 |
| 2200 | 11 | 4 | 3 | 5 | 6 | 7 |
| 2300 | 12 | 4 | 3 | 5 | 6 | 7 |
| 2400 | 12 | 4 | 3 | 5 | 8 | 8 |
| 2500 | 13 | 4 | 3 | 5 | 8 | 8 |

The portions stated above are true when you

+ Take non-fat milk
- At least $50 \%$ of your meat selections are low fat options i.e. lean meat and $50 \%$ from medium fat options


## Appendices

## Appendix B

## STARCH EXCHANGE LIST

Each item on this list contains approximately 15 g of carbohydrate, 3 g of protein and trace amounts of fat, bring it 80 calories per item. Whole grain products average about 2 g of fiber per serving.

| Grains, Cereals, Pasta, Bread |  |  |
| :--- | :--- | :--- |
| S/N | ITEM | I SERVING |
| 1 | Rice (cooked white or brown) | $1 / 3$ cup |
| 2 | Pasta (cooked white or whole wheat) | $1 / 3$ cup |
| 3 | Regular unsweetened cornflakes | $3 / 4 \mathrm{cup}$ |
| 4 | All Bran cereal | $1 / 2 \mathrm{cup}$ |
| 5 | Fruit N' Fiber cereal | 20 g |
| 6 | Sugar frosted cereal | $1 / 2 \mathrm{cup}$ |
| 7 | Pita (6 inches across) | $1 / 2$ |
| 8 | Whole wheat bread | 2 slices |
| 9 | White bread | 1 slice |
| 10 | Golden morn | $1 / 3$ cup |
| 11 | Oat (uncooked) | $1 / 4$ cup |
| 12 | Tortilla (6 inches across) | 1 |
| 13 | Wheat flour | 21 g |
| 14 | Semolina flour | 21 g |
| 15 | Pap (Uncooked, wet) | $1 / 3$ cup |


| Starchy Vegetables |  |  |
| :---: | :---: | :---: |
| 1 | Corn (also sweet corn) | $1 / 2$ cup |
| 2 | Corn on cob, 6 inches long | 1 |
| 3 | Yam | $1 / 2$ cup or 75 g |
| 4 | Potato (sweet and Irish) | $1 / 2$ cup or 100 g |
| 5 | Plantain | $1 / 2$ cup or 65 g |
| 6 | Cassava flour (Garri) | 1/8 cup (17g) |
| 7 | Yam flour (amala and poundo yam) | $1 / 8 \operatorname{cup}(19 \mathrm{~g})$ |
| Snacks and Other Carbohydrates |  |  |
| 1 | Popcorn (popped with no fat and sugar) | 3 cups |
| 2 | Jacob's crackers | 2 |
| 3 | Digestive biscuit | 1 |
| 4 | Honey-1 teaspoon | 6 g of carbs, 21 calories |
| 5 | Granulated sugar-1 teaspoon | 4.2 g of carbs, 16 calories |
| 6 | Sugar-1 cube | $4 \mathrm{~g}, 15$ calories |
| Beans, Peas and Lentils (Cooked) |  |  |
| Each serving $=15 \mathrm{~g}$ Carbs, 7 Protein, $0-1 \mathrm{~g}$ Fat, 125 calories |  |  |
| S/N | Item | 1 serving |
| 1 | Beans, cooked (black, pinto, lima, kidney, white) | $1 / 2$ cup |
| 2 | Green peas | $1 / 2$ cup |
| 3 | Lentils, cooked | $1 / 2$ cup |
| 4 | Baked beans | 1/3 cup |

## FRUITS AND FRUIT JUICES EXCHANGE LIST

| Fruits |  |  |
| :---: | :---: | :---: |
| Each serving $=15 \mathrm{~g}$ Carbs, 0 g Protein, 0 g Fat, 60 calories |  |  |
| S/N | FRUIT | SIZE OF A SERVING |
| 1 | Apple | $113 \mathrm{~g}, 1$ small size |
| 2 | Banana | $113 \mathrm{~g}, 1$ banana |
| 3 | Blueberries | $3 / 4$ cup |
| 4 | Dates | 3 pieces |
| 5 | Grapes | 17 small sizes |
| 6 | Grapefruit | $311 \mathrm{~g}, 1 / 2$ of large size |
| 7 | Golden melon | 1 cup cubed |
| 8 | Kiwi | $100 \mathrm{~g}, 1$ piece |
| 9 | Mango | $156 \mathrm{~g}, 1$ cup diced, 1 small size |
| 10 | Orange | $127 \mathrm{~g}, 1$ small size |
| 11 | Pawpaw | $140 \mathrm{~g}, 1$ cup cubes |
| 12 | Pear | $113 \mathrm{~g}, 1$ small size, or $1 / 2$ of large |
| 13 | Pineapple | 2/3 cup of diced fruit |
| 14 | Plums | $140 \mathrm{~g}, 2$ pieces |
| 15 | Raisings | 2 tablespoons |
| 16 | Star apple (Agbalumo, Udara) | 100 g of pulp, 2 medium sizes |
| 17 | Strawberries | $11 / 4$ cups of whole berries |
| 18 | Soursop | 100 g |
| 19 | Tangerine | $113 \mathrm{~g}, 11 / 2$ of small size |
| 20 | Watermelon | $200 \mathrm{~g}, 11 / 4$ cup of diced fruit |

Fruit Juices, IOO\%, No Added Sugar

| Each serving $=15 \mathrm{~g}$ carbs, 0 g Protein, 0 g fat, 60 calories |  |  |
| :--- | :--- | :--- |
| $\mathrm{S} / \mathrm{N}$ |  | $120 \mathrm{mls}, 1 / 2 \mathrm{cup}$ |
| 1 | Apple juice | $75 \mathrm{mls}, 1 / 3 \mathrm{cup}$ |
| 2 | Fruit juice blends (fruit mixtures) | $120 \mathrm{mls}, 1 / 2 \mathrm{cup}$ |
| 3 | Grape juice | $120 \mathrm{mls}, 1 / 2 \mathrm{cup}$ |
| 4 | Grapefruit juice | $120 \mathrm{mls}, 1 / 2 \mathrm{cup}$ |
| 5 | Orange juice | $120 \mathrm{mls}, 1 / 2 \mathrm{cup}$ |
| 6 | Pineapple juice |  |

## DAIRY EXCHANGE LIST

## Fat-Free (Skim) And Low Fat (i\%) (Best Choice)

| Each serving $=15 \mathrm{~g}$ Carbs, 8 Protein, $0-3 \mathrm{~g}$ Fat, 100 calories |  |  |
| :--- | :--- | :--- |
| $\mathrm{S} / \mathrm{N}$ | Item | 1 serving |
| 1 | Fat-free milk (liquid) | 1 cup |
| 2 | Low fat, $1 \%$ milk (liquid) | 1 cup |
| 3 | Evaporated fat-free milk | $1 / 2$ cup |
| 4 | Fat-free dry milk powder | $1 / 3$ cup or two full tablespoons |
| 5 | Low fat, $1 \%$ milk powder | $1 / 3$ cup or two full tablespoons |
| 6 | Yoghurt, fat-free | $2 / 3$ cup |

## Reduced Fat Selections

Each serving $=15 \mathrm{~g}$ carbs, 8 g Protein, 5 g fat, 120 calories

| 1 | $2 \%$ milk, liquid | 1 cup |
| :--- | :--- | :--- |
| 2 | Plain yoghurt, low fat | $2 / 3$ cup |


| Whole Milk Selections (Limit use-high in saturated fat) |  |  |
| :---: | :---: | :---: |
| Each serving $=15 \mathrm{~g}$ carbs, 8 g Protein, 8 g fat, 160 calories |  |  |
| 1 | Milk, whole, liquid | 1 cup |
| 2 | Evaporated whole milk | $1 / 2$ cup |
| 3 | Milk, whole, dry powder | $1 / 3$ cup or two full tablespoons |
| 4 | Yoghurt, plain (made from whole milk) | 2/3 cup |
| Plant Milk (READ Labels, Calorie content may vary with brands) |  |  |
| 1 | Almond milk, unsweetened | 1 cup $=30$ calories, 2 g carbs, 1 g protein, 2.5 g fat (varies among brands, please check nutrition label) |
| 2 | Tiger nut milk | 1 cup $=60$ calories, 8 g carbs, 1 g protein, 3 g fat |
| 3 | Soy milk | 1 cup $=131$ calories, 12 g carbs, 11 g protein, 5 g fat |
| 4 | Coconut milk | 1 cup $=550$ calories, 13 g carbs, 5 g protein, 57 g fat |

## NON-STARCHY VEGETABLE EXCHANGE LIST

| S/N | Item | I SERVING OF I CUP OF CHOPPED VEGETABLE OR ${ }^{1} 2$ CUP COOKED OR ${ }^{1 / 2}$ CUP JUICED CONTAINS... |
| :---: | :---: | :---: |
| 1 | Asparagus | $27 \mathrm{cal}, 5 \mathrm{~g}$ carbs, 3 g protein, 0 g fat |
| 2 | Beets | $59 \mathrm{cal}, 13 \mathrm{~g}$ carbs, 2 g protein, 0 g fat |
| 3 | Broccoli | $31 \mathrm{cal}, 6 \mathrm{~g}$ carbs, 3 g protein, 0 g fat |
| 4 | Cabbage (all types) | $17 \mathrm{cal}, 4 \mathrm{~g}$ carbs, 1 g protein, 0 g fat |
| 5 | Carrots | $45 \mathrm{cal}, 11 \mathrm{~g}$ carbs, 1 g protein, 0 g fat |
| 6 | Cauliflower | $27 \mathrm{cal}, 5 \mathrm{~g}$ carbs, 2 g protein, 0 g fat |
| 7 | Celery | $16 \mathrm{cal}, 3 \mathrm{~g}$ carbs, 1 g protein, 0 g fat |
| 8 | Coleslaw | $35 \mathrm{cal}, 8 \mathrm{~g}$ carbs, 1 g protein, 0 g fat |
| 9 | Cucumber | $16 \mathrm{cal}, 4 \mathrm{~g}$ carbs, 1 g protein, 0 g fat |
| 10 | Garden eggs | 1 large one is 14 cal |
| 11 | Garlic | $202 \mathrm{cal}, 45 \mathrm{~g}$ carbs, 9 g protein, 0 g fat |
| 12 | Green and Yellow bell pepper | $30 \mathrm{cal}, 7 \mathrm{~g}$ carbs, 1 g protein, 0 g fat |
| 13 | Green beans | $31 \mathrm{cal}, 7 \mathrm{~g}$ carbs, 2 g protein, 0 g fat |
| 14 | Green onions (spring onions) | $32 \mathrm{cal}, 7 \mathrm{~g}$ carbs, 2 g protein, 0 g fat |
| 15 | Kale | $33 \mathrm{cal}, 6 \mathrm{~g}$ carbs, 3 g protein, 0 g fat |
| 16 | Lettuce | $5 \mathrm{cal}, 1 \mathrm{~g}$ carbs, 0.5 g protein, 0 g fat |
| 17 | Mushrooms | $16 \mathrm{cal}, 2 \mathrm{~g}$ carbs, 2 g protein, 0 g fat |
| 18 | Okra | $33 \mathrm{cal}, 7 \mathrm{~g}$ carbs, 2 g protein, 0 g fat |
| 19 | Onions | $46 \mathrm{cal}, 11 \mathrm{~g}$ carbs, 1 g protein, 0 g fat |
| 20 | Pumpkin leaves (Ugwu) | $7 \mathrm{cal}, 1 \mathrm{~g}$ carbs, 1 g protein, 0 g fat |
| 21 | Red bell pepper (Tatashe) | $28 \mathrm{cal}, 6 \mathrm{~g}$ carbs, 1 g protein, 0 g fat |
| 22 | Scotch bonnet (Ata-rodo) | $27 \mathrm{cal}, 5 \mathrm{~g}$ carbs, 1 g protein, 0 g fat |
| 23 | Spinach (Tete) | $7 \mathrm{cal}, 1 \mathrm{~g}$ carbs, 1 g protein, 0 g fat |
| 24 | Tomatoes (canned or fresh) | $32 \mathrm{cal}, 7 \mathrm{~g}$ carbs, 2 g protein, 0 g fat |
| 25 | Zucchini | $19 \mathrm{cal}, 3.5 \mathrm{~g}$ carbs, 1 g protein, 0 g fat |

## PROTEIN EXCHANGE LIST

## Verr Lean selections (Very good choices)

Each serving $=0 \mathrm{~g}$ carbohydrate, 7 g protein, $0-2 \mathrm{~g}$ fat, 35 cal

| S/N | ITEM | I SERVI | APPROXIMATE SIZE |
| :--- | :--- | :--- | :--- |
| 1 | Turkey breast or chicken breast, <br> skin removed | 28 g | Half of one chicken breast is <br> 3.5 servings, 100 g and 125 <br> calories |
| 2 | Fish (tilapia, cod, catfish, sole, <br> croaker etc) | 28 g | The mid-section or tail <br> section of a medium sized <br> fish is 3.5 servings, 100 g and <br> 125 calories |
| 3 | Canned tuna in water | 28 g |  |
| 4 | Shellfish (shrimps, prawns, lobsters, <br> clams, scallop | 28 g |  |

Lean selections (GOOD Choices)

Each serving $=0 \mathrm{~g}$ carbohydrate, 7 g protein, $0-3 \mathrm{~g}$ fat, 45 cal

| 1 | Beef (sirloin, tenderloin, steak, <br> roast) | 28 g | The size of a deck of cards is <br> 3 servings |
| :--- | :--- | :--- | :--- |
| 2 | Cheese with $0-3 \mathrm{~g}$ of fat/28g | 28 g |  |
| 3 | Cottage cheese | $1 / 4$ cup |  |
| 4 | Egg whites | 2 | $1 / 4$ cup |


| 9 | Pork (lean): ham, pork tenderloin, rib or loin chop | 28 g |  |
| :---: | :---: | :---: | :---: |
| 10 | Poultry (skinless): darker meats like the thighs, drumstick and wings of chicken, domestic duck or goose, turkey well drained of fat | 28 g | 3.5 servings, 100 g is approx. half of a quarter chicken i.e. a piece of thigh, drumstick or wing of a medium sized chicken |
| 11 | Salmon canned | 28 g |  |
|  | Sardine canned (drained of oil) | $2$ medium |  |
| 13 | Tuna canned in oil, drained | 28 g |  |
| 14 | Chicken gizzard | 50 g |  |
| Medium fat selections, 75CAL Per Serving |  |  |  |
| 1 | Cheese with $4-7 \mathrm{~g}$ of fat/ 28 g | 28 g |  |
| 2 | Mozzarella | 28 g |  |
| 3 | Beef: corned beef, ground beef, meatloaf, prime rib (trimmed of fat), tongue | 28 g |  |
| 4 | Fried fish | 28 g |  |
| 5 | Poultry: chicken with skin, dove, fried chicken, ground turkey | 28 g |  |
| 6 | Ricotta cheese | $\begin{aligned} & 1 / 4 \text { cup or } \\ & 56 \mathrm{~g} \\ & \hline \end{aligned}$ |  |
| 7 | Sausage with 4-7g fat/28g | 28 g |  |


| HIGH FAT SELECTION, IOOCAL PER SERVING (LIMIT USE) |  |  |
| :--- | :--- | :--- |
| 1 | Pork bacon (before cooking) | 2 slices <br> $(28 \mathrm{~g}$ <br> each) |
| 2 | Turkey bacon (before cooking) | 3 slices <br> $(14 \mathrm{~g}$ |
|  |  | each) |
| 3 | Regular cheese | 28 g |
| 4 | Pork: ground, sausage, spareribs | 28 g |
| 5 | Hot dog: beef, pork, turkey, chicken <br> or combination (10 per pound $/ 450 \mathrm{~g}$ <br> sized package) | 1 |
| 6 | Sausage with 8 or more g of fat per <br> 28 g | 28 g |

## FAT EXCHANGE LIST

Each serving has 0 g carbs, 0 g protein, 5 g fat and 45 calories

| MONO-UNSATURATED FATS |  |  |
| :--- | :--- | :--- |
| S/N | ITEM | I SERVING |
| 1 | Avocado | 2 tablespoons $(28 \mathrm{~g})$ or $1 / 5$ of an average <br> sized one |
| 2 | Nut butters (trans-fat free): <br> almond, cashew, peanut | $11 / 2$ teaspoons |
| 3 | Nuts: Almonds |  |
|  | $\quad$ Cashew |  |
|  | Peanuts | 6 nuts |
|  | Pistachios | 6 nuts |
|  | Pecans | 10 nuts |
| 4 | Oils: Olive, canola, peanut | 16 nuts |
| 5 | Olives: Black (ripe) | 1 halves |
|  | Green, (stuffed) | 8 large |
|  |  | 10 large |



## Appendices

## Appendix C



100 g plantain (2 servings of starch)


One portion of eba (3 servings of starch)


One medium sized chicken breast (3 servings of protein)


One small banana (one fruit serving)


One portion of amala (3 servings of starch)


One portion chicken drum stick, remove skin (3 servings of protein)


One small sweet potato (1 serving of starch)


One portion wheat (3 servings of starch)


One portion fish (3 servings of protein)

## Appendices

## Appendix D

| Dar | Breakfast | SNACK | LUNCH | Dinner |
| :---: | :---: | :---: | :---: | :---: |
| Mon | Smoothie (4 servings of fruit*) or eat as fruit bowl +1 piece of skinless chicken ( 100 g raw or 70 g cooked skinless chicken breast) | 2/3 cup low fat yoghurt | 1 boiled small plantain (130g, raw) <br> + fried egg (1 whole <br> +1 egg white +5 ml oil + veggies $)+1$ serving of fruit | 2 small potatoes or 100 g plantain + pepper soup with veggies +100 g shrimp cooked (or a piece of fish) + 1 fruit |
| Tues | 2 small Sweet potato $(150 \mathrm{~g})$ or 150 g yam +1 serving fish (see recipe in Chap. 3) + 1 serving of fruit | 1 finger of banana $+10$ peanuts | 1 cup cooked rice + efo-riro (each serving 5 mls of oil or less) + 1 boiled egg +1 fruit or 1 more boiled egg | Salad (coleslaw + lettuce $+1 / 2$ can 200 g baked beans $+1 / 2$ cup sweet corn +1 fruit diced +1 hardboiled egg |
| Wed | $11 / 2$ cups cornflakes/ 1 cup Wheetabix + 1 serving of skimmed milk +1 fruit | 2 fruits | 2/3 cup swallow (or see size in appendix C) + okra soup (each serving 5 mls of oil or less) +1 piece of fish | 1 small roasted plantain + snail sauce ( 2 medium pieces of snails, pepper, veggies and 5mls oil) |
| Thur | Same as Monday |  |  |  |
| Fri | Same as Tuesday |  |  |  |
| Sat | Same as Wednesday |  |  |  |
| Sun | CHEAT DAY* |  |  |  |

+ 1 serving of fruit: check for the size of a serving under fruits in appendix B
- Cheat day can be on any day not necessarily Sunday
+ Efo-riro: for example, if I want to make a batch to serve three times, I will use 15 mls of oil or less, if I want to make 4 servings I'll use 20 mls or less and so on, same applies for okra
+ Extra cucumbers and carrots can be eaten as snack with the above meals.


## REFERENCES

1. Heart Foundation. Guide to management of hypertension: lifestyle modification, [2008]. Heart Foundation. [Online] Available at: https://heartfoundation.org.au/ images/uploads/publications/lifestyle-modification.pdf [Assessed 20/06/2016].
2. Lawrence J. Lifestyle modification as a means to prevent and treat high blood pressure. AJASN. 2003,14(2): S99-S102 [Online] Available at: http://jasn.asnjournals.org/ content/14/suppl_2/S99.full. [Assessed 01/06/2016].
3. Sahay B and Sahay R. Lifestyle modification in management of diabetes mellitus. J Indian Med Assoc. 2002, 100(3):178-80 [Online] Available at: http://www.ncbi.nlm. nih.gov/pubmed/12408279 [Assessed 01/06/2016].
4. The Journal of the American Osteopathic Association. Managing your dyslipidaemia with TLC: Therapeutic lifestyle changes. The Journal of the American Osteopathic Association. 2010, 110(5): eS17-eS18 [Online] Available at: http://jaoa.org/article. aspx?articleid=2093954 [Assessed 01/06/2016].
5. American Diabetes Association. Nutrition recommendations and interventions for diabetes. Diabetes Care, 2008, 31(1) S61-S78. [Online] Available at: http://care. diabetesjournals.org/content/31/Supplement_1/S61 [Assessed 20/06/2016].
6. DeNoon J. 7 Rules for Eating. WebMD, 2009. [Online] Available at: http:// www.webmd.com/food-recipes/news/20090323/7-rules-for-eating\#1 [Assessed 20/06/2016].
7. American Diabetes Association. Grains and Starchy Vegetables, [2014]. American Diabetes Association. [Online] Available at: http://www.diabetes.org/food-and-fitness/ food/what-can-i-eat/making-healthy-food-choices/grains-and-starchy-vegetables.html [Assessed 28/06/2016].
8. American Diabetes Association. Protein Foods, 2014. American Diabetes Association. [Online] Available at: http://www.diabetes.org/food-and-fitness/food/what-can-i-eat/making-healthy-food-choices/meat-and-plant-based-protein.html [Assessed 28/06/2016]
9. Heart Foundation. Saturated and trans fat [no date]. Heart Foundation. [Online] Available at: http://heartfoundation.org.au/healthy-eating/food-and-nutrition/fats-and-cholesterol/saturated-and-trans-fat [Assessed 01/06/2016]
10. American Heart Association. What should my daily sodium intake be? [no date]. American Heart Association. [Online] Available at: http:// sodiumbreakup.heart.org/sodium-411/how-much-sodium-do-you-need/?utm_ source $=$ HL\&utm_medium = HeartOrg\&utm_term = SodiumAndSalt\&utm_ content $=$ SodiumTargets\&utm_campaign=SodiumBreakup [Assessed 02/06/2016] 11a. BreakUpWithSalt. Sources of sodium [2017]. BreakUpWithSalt. [Online] Available at: http://www.sodiumbreakup.heart.org/sources_of_sodium [Assessed 23/09/2017]. 11b. NHS Choices. Salt: the facts [2015]. NHS Choices. [Online] Available at: http:// www.nhs.uk/Livewell/Goodfood/Pages/salt.aspx [Assessed 02/06/2016].
11. National Kidney Foundation. Top 10 tips for reducing salt in your diet [no date]. National Kidney Foundation. [Online] Available at: https://www.kidney.org/news/ ekidney/june10/Salt_june10 [Assessed 01/06/2016].
12. American Heart Association. Breaking up with excess sodium: how to reduce the salt in your diet [no date]. American Heart Association. [Online] Available at: http:// sodiumbreakup.heart.org/sodium-411/breaking-up-with-excess-sodium/?utm_ source $=$ HL\&utm_medium $=$ HeartOrg\&utm_term $=$ SodiumAndSalt\&utm_ content $=$ SodiumTargets\&utm_campaign=SodiumBreakup [Assessed 01/06/2016].
13. American Heart Association. Alcohol and heart health [2015]. . American Heart Association.[Online] Available at: http://www.heart.org/HEARTORG/HealthyLiving/ HealthyEating/Nutrition/Alcohol-and-Heart-Health_UCM_305173_Article.jsp\#. V6SVd_krK00 [Assessed 06/06/2016].
14. WebMD. Diabetes and Alcohol [2016]. WebMD. [Online] Available at: http:// www.webmd.com/diabetes/guide/drinking-alcohol. [Assessed 06/06/2016]
15. Dansinger M.L. Artificial Sweeteners and Diabetes [2015]. WebMD. [Online] Available at: http://www.webmd.com/diabetes/artificial-sweeteners-diabetes-patients [Assessed 06/06/2016]
16. Scaefer E.J., Gleason J.A. and Dansinger M.L. Dietary fructose and glucose differentially affect lipid and glucose homeostasis. J Nutr. 2009, 139(6): 1257S-1262S [Online] Available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2682989/ [Assessed 06/06/2016].
18 American Diabetes Association. Low-calorie sweeteners [2014]. American Diabetes Association. [Online] Available at: http://www.diabetes.org/food-and-fitness/food/ what-can-i-eat/understanding-carbohydrates/artificial-sweeteners/?referrer=https $/$ / [Assessed 06/06/2016].
17. Diabetes UK. Sugar, sweeteners and diabetes [no date]. Diabetes UK. [Online] Available at: https://www.diabetes.org.uk/Guide-to-diabetes/Enjoy-food/Carbohydrates-and-diabetes/Sugar-sweeteners-and-diabetes/ [Assessed 06/06/2016].
20 American Diabetes Association. Weight Loss [no date]. American Diabetes Association. [Online] Available at: http://www.diabetes.org/food-and-fitness/weightloss/?referrer=https:/ [Assessed 08/06/2016].
18. American Heart Association. Weight Management and Blood Pressure [2014]. AmericanHeartAssociation.[Online] Availableat:http://www.heart.org/HEARTORG/ Conditions/HighBloodPressure/PreventionTreatmentofHighBloodPressure/Weight-Management-and-Blood-Pressure_UCM_301884_Article.jsp\#.V6SiKPkrK00 [Assessed 08/06/2016].
19. Houston M., Fazio S., Chilton F, Wise D., Jones K., Barringer T. and Bramlet D. Nonpharmacologic treatment of dyslipidemia. Progress in Cardiovascular Disease. 2009, 52:61-94 [Online] Available at: http://hypertensioninstitute.com/pdf/Dyslipidemia\  Paper\%20PCVD\%20\%20September\%202009.pdf[Assessed 08/06/2016].
20. Healthline. The benefits of healthy habits [2016]. Healthline. [Online] Available at: http://www.healthline.com/health/5-benefits-healthy-habits\#Combatsdiseases4 [Assessed 08/06/2016].
21. Diabetes Self-management. Diabetes Meal Planning: The Plate Method [2015]. Diabetes Self-management. [Online] Available at: http://www.diabetesselfmanagement. com/blog/diabetes-meal-planning-the-plate-method/ [Assessed 11/06/2016].
22. American Diabetes Association. Create Your Plate [2015]. American Diabetes Association. [Online] Available at: http://www.diabetes.org/food-and-fitness/food/ planning-meals/create-your-plate/ [Assessed 11/06/2016].
23. Daily Fitness Resource. 6 major factors affecting your calorie requirements [2012]. Daily Fitness Resource. [Online] Available at: http://dailyfitnessresource.blogspot. com/2012/10/6-major-factors-affecting-yourcalorie.html?m=1 [Assessed 11/06/2016]. 27. Weight Loss for All. 9 Factors That Affect Metabolic Rate [no date]. Weight Loss for All. [Online] Available at: http://www.weightlossforall.com/factors-change-metabolism. htm [Assessed 11/06/2016].
24. Science Learning. Energy requirements of the body [no date]. Science Learning. [Online] available at: http://sciencelearn.org.nz/Contexts/Digestion-Chemistry/ Science-Ideas-and-Concepts/Energy-requirements-of-the-body2011 [Assessed 12/06/2016]
25. Globalrph. Determination of the Resting Metabolic Rate (RMR) [no date]. Globalrph. [Online] Available at: http://m.globalrph.com/?url=http\%3A\%2F\%2Fwww.globalrph. com\%2Fharris-benedict-equation.htm\&utm_referrer=\#2719 [Assessed 12/06/2016].
26. Coleman E. Minimum amount of calories needed per day to survive [2015]. Livestrong. [Online] Available at: http://www.livestrong.com/article/310517-minimum-amount-of-calories-needed-per-day-to-survive/ [Assessed 12/06/2016].
27. Calorie.net. Calorie calculator [no date]. Calorie.net. [Online] Available at: http:// www.calculator.net/calorie-calculator.html [Assessed 12/06/2016].
28. Diabetes Teaching Center at the University of California, San Francisco. Understanding Food [no date]. Diabetes Teaching Center at the University of California, San Francisco. [Online] Available at: https://dtc.ucsf.edu/living-with-diabetes/diet-and-nutrition/ understanding-food/ [Assessed 15/06/2016].
29. Diabetes Teaching Center at the University of California, San Francisco. Food Exchange Lists [no date]. Diabetes Teaching Center at the University of California, San Francisco. [Online] Available at: https://dtc.ucsf.edu/pdfs/FoodLists.pdf [Assessed 15/06/2016].
30. Eat for Health.gov.au. Food labels: what to look for [2015]. Eat for Health.gov.au. [Online] Available at: https://www.eatforhealth.gov.au/eating-well/how-understand-food-labels/food-labels-what-look [Assessed 15/06/2016].

## ABOUT THE AUTHOR

Odunayo is the founder and current CEO of OptimumFoodie, a health and wellness company focused on helping Nigerians build a healthy relationship with foods they love, towards achieving optimal fitness and happiness.

She completed her bachelor's degree in pharmacy as the best graduating student with first class honours, at the University of Lagos. She is a certified nutritionist and integrative nutrition health coach.

Her passion for nutrition and closing the wide knowledge gap regarding this subject, especially in the Nigerian context, resulted in her writing this book. You'll also find her consistently sharing valuable nutrition information via her company's social media pages (@optimumfoodie) and website optimumfoodie.com

## MY PROGRAMS AND PLANS

From my experience helping 1000s of women and men achieve optimal fitness, I've identified how different we all are. While some people have gone on to lose up 20kg with just my book, many others need extra support to achieve same. Some of you need someone to figure out everything and guide you, and offer accountability so you can succeed.

If this describes you, then you should seriously consider joining one of my programs. There are different ones to cater for different groups of people.

- Total Body Transformation program - This is my group program
- Fit and Trim - This is a high personalized one-on-one program
- Fit Mums - for our new mummies
- The Blood Sugar Diet - for those struggling with their blood sugar

Kindly visit optimumfoodie.com to learn more about them.
Call/ Whatsapp: 08080471993 for further enquires or to join us
Or Email: odunayo@optimumfoodie.com
Be sure to follow us on Facebook and Instagram: @optimumfoodie

## No Forbidden Foods ....JUST HEALTHY NIGERIAN mEALS

WHAT ShoUld I be EATING? iis the ultimate guide to weight loss, and getting control of your blood sugar and blood pressure on tasty Nigerian meals! It's pretty amazing how easy it can be, if you only knew how to go about it, and that's what this book is all about. In a simple, step-by-step manner you are going to learn:

- How to choose healthier food options
- How to get the perfect portions
- Count calories in Nigerian meals
- Understand food nutrition labels
- Bust common nutrition myths and learn the facts
- And so much more...

To help you get started immediately, the book provides you 2 FREE SAMPLE NIGERIAN MEAL PLANS, a 1500 cal and a 1200 cal plan.

On an average our readers lose $4-7 \mathrm{~kg}$ every 4 weeks! Visit the book's page on our website www.optimumfoodie.com for a snippet of some of their testimonials. This book will be one of the best and smallest investments you'll ever make for your body and overall fitness.

The author, Odunayo Abdulai, is a first-class graduate of Pharmacy, from the University of Lagos. She is a certified nutritionist, integrative nutrition health coach and the founder/ CEO of OptimumFoodie. Through her programs and book she has helped 1000s of women and men achieve their body and health goals eating Nigerian meals. In the new age of excessive and baseless information about nutrition, she's very passionate about providing individuals unbiased and scientifically backed information, towards achieving the best of health and overall wellness.


## OptimumFoodie

www.optimumfoodie.com
Facebook \& Instagram: @optimumfoodie
US \$10


[^0]:    *See Appendix C for portion sizes
    ${ }^{*}$ Fried egg $=$ Two whole eggs + veggies +5 mls olive oil
    *Veggies means chopped or shredded vegetables, which could include, cabbage, carrot, green peas, green pepper, tomatoes, pepper and onions.

    * 1 cup skimmed milk = 1 cup of the skimmed milk or $1 / 3$ cup of the dried skimmed milk mixed with water
    *Milk can be taken in tea, not necessarily alone
    *You can use sweeteners for your tea and cereal.

