CHARLIE THE CARB
A STORY ABOUT SIMPLE CARB COUNTING

HI, MY NAME IS CHARLIE THE CARB!
I'm one of the carbs, or carbohydrates, in the foods you eat every day!

Carbs play a big role in keeping you healthy. We're your number one source for energy!

Sure, I have friends who help me...

...like Frankie fats and Polly protein.

But most of the energy you get from food comes from the calories in carbs.

Read on! The more you know about me and my carb buddies, the better you may be able to take care of yourself...

...and your diabetes!

Many people with diabetes count the carbs they eat at each meal to help them control their blood sugar.
LET’S LOOK AT A FEW THINGS BEFORE WE TALK ABOUT CARB COUNTING.

WE ALL NEED THE CALORIES AND OTHER GOOD THINGS WE GET FROM FOOD TO STAY HEALTHY.

THE CARBS WE EAT COME MAINLY FROM THE SUGARS IN FRUIT, STARCHY FOODS, LIKE PASTA OR BREAD, AND DAIRY FOODS LIKE MILK AND YOGURT.

THE THREE MAIN SOURCES OF CALORIES IN FOODS ARE:

- CARBOHYDRATES
- PROTEIN
- FAT

CARBS AFFECT BLOOD SUGAR LEVELS MORE THAN PROTEINS OR FATS.

PROTEIN AND FAT GIVE YOU CALORIES, AND EFFECT YOUR BLOOD SUGAR, BUT NOT AS MUCH AS CARBS DO.

BUT I HAVE MORE CALORIES THAN CARBS DO!

THAT’S TRUE. FATS HAVE MORE CALORIES THAN CARBS. A LOT MORE!

BUT FATS DON’T RAISE BLOOD SUGAR AS MUCH OR AS QUICKLY AS CARBS DO.

YOU CAN’T BE HEALTHY WITHOUT PROTEIN!

THAT’S TRUE TOO, POLLY. PROTEIN HELPS US HAVE HEALTHY SKIN, STRONG MUSCLES, AND MANY OTHER THINGS. BUT COMPARED TO CARBS, PROTEIN HAS ONLY A SMALL EFFECT ON YOUR BLOOD SUGAR LEVEL.
OK Charlie, carbs are important, but isn’t eating lots of healthy foods important too? Like foods with lots of protein!

Yeah, it is.

But if you need to control your blood sugar levels, eating the right amount of carbs at each meal can be a big help!

Okay, okay!

We get it! So tell us about carb counting already!
OK. HERE ARE SOME WAYS THAT CARB COUNTING CAN HELP YOU:

EAT MORE OF THE FOODS THAT YOU LIKE.

GREAT!

MAKE MEAL PLANNING EASIER.

THAT’S ALWAYS GOOD!

IF YOU TAKE INSULIN, COUNTING CARBS WILL HELP YOU GET THE RIGHT AMOUNT OF INSULIN YOU NEED!

WELL, I’M IMPRESSED! LET’S EAT!

NOT SO FAST, FRANKIE. THERE ARE A FEW THINGS YOU NEED TO KNOW FIRST.
Before you can count carbs, you need to know how many carbs are in the foods you eat… **before** you eat them!

Foods with a lot of carbohydrate make blood sugar go higher than foods with only a few carbs.

Do we have to know how many carbs are in all the foods we eat?!

No, Polly, just the foods with carbohydrate.

But that’s a lot of food!

True. Carbohydrates are found in a lot of different foods. But the common foods most of us eat are broken into “food groups”. This makes it easier for you to see (and compare) how many carbs are in the foods you eat.
THE MAIN FOOD GROUPS ARE:

- BAD OR SATURATED FATS
- SWEETS
- PROTEINS (FISH, POULTRY, EGGS, AND MEAT (LIMIT MEAT))
- DAIRY
- VEGETABLES
- FRUITS

WHOLE GRAINS
(SUCH AS WHOLE OATS, CORN, BROWN RICE, WHOLE WHEAT BREAD OR PASTA, AND BARLEY) AND SMALL AMOUNTS OF GOOD FATS.

FOOD GROUPS WITH CARBS ARE THE GRAINS, FRUITS, MILK, VEGETABLES, AND SWEETS.

MANY (NOT ALL) VERY HIGH PROTEIN FOODS, LIKE MEAT AND CHICKEN, HAVE NO CARBS.

FATS, LIKE BUTTER OR BACON, HAVE NO CARBS.
1. Almost all of the foods you buy have food labels.

2. Food labels tell you the serving size and how many carbs are in a serving of that food.

3. A number of books, such as the American Diabetes Association Exchange Lists for Meal Planning Book, have easy-to-read lists with the number of carbs in a serving of food for the foods most of us eat.

Here's what a food label looks like with some helpful tips on what to look for.
BUT WE ALL EAT DIFFERENT FOODS THAT HAVE DIFFERENT AMOUNTS OF CARBOHYDRATE IN THEM!

THAT'S TRUE FRANKIE, THAT'S WHY DIVIDING FOOD INTO GROUPS IS A BIG HELP IF YOU WANT TO COUNT CARBS.

THE NUMBER OF CARBS IN FOODS MAY BE DIFFERENT, BUT ONE SERVING OF ANY FOOD WITHIN A FOOD GROUP HAS THE SAME NUMBER OF CARBS.

ONE SMALL APPLE = ONE SERVING = 15 GRAMS OF CARBS!

AND, YOU CAN SWITCH OR TRADE FOODS ANY TIME AS LONG AS YOU STAY WITHIN YOUR MEAL PLAN.

OK, I GET IT. SO IF I ONLY EAT A HALF A SERVING, I EAT HALF AS MANY CARBS?

RIGHT!

LET'S DO SOME EXAMPLES OF THIS TO BE SURE WE UNDERSTAND HOW TO START CARB COUNTING.

A. 1 SERVING OF APPLESAUCE = 28 GRAMS (OR 28G ON A FOOD LABEL)

B. 2 SERVINGS OF APPLESAUCE = ___________ G OR GRAMS

C. 1/2 SERVINGS OF APPLESAUCE = ___________ G OR GRAMS

ANSWERS UPSIDE DOWN
B: 28  C: 14
WHAT IF THE FOOD LABEL SAYS THE FOOD HAS 26 GRAMS OF CARBS IN A SERVING, AND ONE GRAM OF SUGAR, WHICH IS ALSO CARBS?

THAT'S A LITTLE BIT TOUGHER!

NOT REALLY. HERE, LET'S TAKE ANOTHER LOOK AT THE FOOD LABEL.

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**Nutrition Facts**

Serving Size 1/3 cup dry (40g)
Servings Per Container About 11

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THE NUMBER OF GRAMS OF SUGAR ON A NUTRITION FACTS LABEL (OR FOOD LABEL) ARE PART OF THE TOTAL AMOUNT OF CARBOHYDRATE PER SERVING. YOU DON'T HAVE TO COUNT SUGAR GRAMS WHEN YOU ADD UP THE TOTAL AMOUNT OF CARBS YOU ARE EATING.
NO, FRANKIE. SUGAR-FREE DESSERTS AND OTHER FOOD OFTEN HAVE JUST AS MANY TOTAL CARBS AS REGULAR DESSERTS. YOU ALWAYS NEED TO LOOK AT THE FOOD LABEL TO FIND OUT.

WHAT IF I BUY SUGAR-FREE COOKIES? I DON’T NEED TO WORRY ABOUT CARBS THEN, RIGHT?

WHAT IF ONE SERVING ISN’T ENOUGH FOOD?

IS ANYONE SURPRISED THAT FRANKIE FATS ASKED THAT QUESTION?

ACTUALLY, IT’S A GOOD QUESTION, POLLY.

WE ALL EAT MANY SERVINGS OF FOOD EVERY DAY.

IF YOU WANT TO EAT MORE THAN ONE SERVING OF A FOOD, FIND THE NUMBER OF CARBS IN ONE SERVING ON THE LABEL AND THEN DECIDE HOW MANY SERVINGS YOU WANT TO EAT.
LET'S SAY YOU WANT TO EAT TWO SERVINGS OF CEREAL.

IF YOU WANT TO EAT TWO SERVINGS, THEN MULTIPLY THE TOTAL NUMBER OF CARBS BY TWO. (26 X 2)

OR, I COULD JUST ADD THEM UP. IF I WANTED TWO CUPS OF CEREAL THAT HAD 12 CARBS IN ONE SERVING, I COULD JUST ADD 12 PLUS 12. RIGHT?

RIGHT, POLLY. AND IF YOU ONLY WANTED A 1/2 SERVING YOU'D DIVIDE 12 BY 2 AND GET 6 CARBS!

I GET IT! SO IF I WANTED TO ADD SKIM MILK TO MY CEREAL (MORE PROTEIN!), ALL I DO IS ADD HOW MANY CARBS ARE IN THE SERVING OF MILK I AM USING.

YOU'RE RIGHT. YOU'RE COUNTING ALL THE CARBS YOU EAT AT EACH MEAL. YOU NEED TO ADD THE NUMBER OF CARBS IN THE CEREAL TO THE NUMBER OF CARBS IN THE MILK TO GET THE "TOTAL CARBS" FOR THE MEAL.

TALK TO YOUR DIABETES EDUCATOR OR DIETICIAN IF YOU WANT MORE INFORMATION ON HOW TO FIND THE TOTAL CARBS YOU EAT AT EACH MEAL.
COUNTING CARBS WILL SHOW YOU:

HOW MANY CARBS YOU EAT AT EACH MEAL, AND

HOW MUCH YOUR BLOOD SUGAR MAY GO UP AFTER YOU EAT A MEAL OR SNACK

ONCE YOU KNOW THIS, YOU CAN DECIDE IF YOU WANT TO:

EAT MORE FOOD TO MEET YOUR MEAL PLAN GOALS FOR THE DAY

EAT LESS FOOD TO MEET YOUR MEAL PLAN GOALS, OR

TAKE MORE OR LESS INSULIN TO KEEP YOU BLOOD SUGAR LEVELS UNDER CONTROL (IF YOU TAKE INSULIN).
WOW, THAT’S A MOUTHFUL!

VERY FUNNY, POLLY!

YEAH, BUT SPEAKING OF MOUTHFULS, HOW DO I KNOW HOW MANY CARBS I NEED TO EAT?

WELL, FRANKIE, EACH OF US HAS A MEAL PLAN TO HELP US STAY HEALTHY. THE NUMBER OF CARBS YOU EAT EACH DAY DEPENDS ON YOUR HEIGHT, WEIGHT, AGE, AND HOW ACTIVE YOU ARE.

YOU AND YOUR DIABETES EDUCATOR OR DIETITIAN WILL WORK TOGETHER TO CREATE A MEAL PLAN THAT GIVES YOU THE CARBS, PROTEIN AND FATS YOU NEED TO HAVE ENERGY AND ENJOY LIFE.

I DON’T LIKE PLANS.

IT’S NOT THAT HARD!

THAT’S WHY THEY CALL IT “SIMPLE” CARB COUNTING. YOUR DOCTOR OR NURSE WILL GIVE YOU ONE OF THE CARB COUNTING BOOKS I TOLD YOU ABOUT TO HELP YOU.

THE BOOKLETS HAVE LISTS SHOWING THE NUMBER OF CARBS IN A SERVING OF FOOD FOR THE COMMON FOODS MOST OF US EAT.
CAN I EAT TWO DESSERTS INSTEAD OF ONE?

THAT SOUNDS FUNNY, BUT IT’S A GOOD QUESTION.

IT’S OK TO EAT MORE OF SOME FOODS - IF YOU EAT LESS OF OTHER FOODS.

TRADING FOODS IS OK SOMETIMES.

YOUR GOAL IS TO EAT A HEALTHY MIX OF FOODS FROM DIFFERENT FOOD GROUPS (LIKE WHOLE GRAINS, FRUITS AND VEGETABLES) EACH DAY.

THIS WILL HELP YOU STAY WITHIN YOUR MEAL PLAN GOALS FOR THE DAY.

I LOVE PORTIONS. THE BIGGER, THE BETTER.

I GUESS THAT’S WHY THEY CALL YOU FRANKIE FATS.

MEASURING THE PORTION SIZE (HOW MUCH YOU EAT) IS VERY IMPORTANT.

EVEN IF YOU COUNT HOW MANY CARBS YOU EAT, YOU CAN STILL GAIN WEIGHT IF YOU DON’T LEARN HOW TO CONTROL YOUR PORTION SIZES.

IF YOU DON’T MEASURE YOUR FOOD, YOU MAY BE EATING MORE OR LESS THAN YOU THINK YOU ARE.
HERE ARE SOME EASY WAYS TO FIND THE PORTION SIZE OF THE FOODS YOU EAT:

COUNT: COUNT HOW MANY THINGS YOU ARE EATING, SUCH AS 10 SMALL GRAPES (AND THEN SEE HOW MANY SERVINGS THAT THIS PORTION OF FOOD IS)

MEASURE: MEASURE THE VOLUME (AMOUNT) OF WHAT YOU EAT OR DRINK, SUCH AS 1/2 CUP OR 4 OUNCES OF JUICE, OR TWO TEASPOONS OF OLIVE OIL.

COMPARE: IF YOU CAN’T MEASURE YOUR FOOD WHEN YOU EAT, MANY PEOPLE COMPARE THE FOOD PORTION TO SOMETHING THEY KNOW. THIS IS NOT THE BEST WAY TO COUNT CARBS, ESPECIALLY IF YOU TAKE INSULIN, BUT IT CAN HELP AT TIMES.

WAYS TO COMPARE FOODS TO GIVE YOU AN IDEA OF A PORTION SIZE INCLUDE:

3 OUNCES OF MEAT = A DECK OF CARDS

1/4 CUP OF RAISINS = 1 LARGE EGG

1/2 CUP OF FRUIT = HALF A BASEBALL

CLOSED SMALL FIST = 1 CUP

TALK TO YOUR DIABETES EDUCATOR OR DIETITIAN FOR MORE IDEAS ON FINDING PORTION SIZES.
CAN WE HAVE ANOTHER EXAMPLE OF HOW TO COUNT CARBS?

SURE, POLLY.

LET’S MAKE A SIMPLE CARB-COUNTING PLAN FOR LUNCH.

GROAN!

GOOD IDEA! I THINK I CAN DO IT.

OK, THEN YOU CAN START!

HERE’S A FOOD LABEL FOR CHICKEN WITH PASTA SOUP FOR LUNCH. WHAT IS ONE SERVING?

1/2 CUP

RIGHT, BUT IS THAT HOW MUCH YOU WILL EAT FOR LUNCH?

NO. I WOULD HAVE A WHOLE CUP.

AND HOW MANY CARBS WILL BE IN ONE WHOLE CUP OF SOUP?

I KNOW! IF THERE ARE 20 CARB GRAMS IN ONE SERVING, 20 + 20 = 40 GRAMS!
I'd like a small banana, too.

This book you gave us says that a small banana is about 4 ounces and has 15 grams of carbohydrate.

That's right, Polly. Now what is the total number of carbs you are having for lunch?

Well, there are 40 carbs in the soup portion I want, and 15 carb grams in the banana, so 40 + 15 = 's 55.

That's right—for this meal. If you eat everything you planned to eat, you will eat 55 grams of carbohydrate.

It's just as easy to use simple carb counting for all your meals.
EATING THREE MEALS A DAY, AND SNACKS WHEN YOU NEED THEM, WILL HELP YOU GET THE RIGHT BALANCE OF CARBOHYDRATES ALL DAY TO GIVE YOU ENERGY AND KEEP YOUR BLOOD SUGAR UNDER CONTROL.

ALL YOU NEED ARE SOME SIMPLE TOOLS TO GET YOU STARTED, SUCH AS THE CARBOHYDRATE COUNTING AND FOOD EXCHANGE LISTS BOOKS YOU CAN GET AT YOUR DOCTOR’S OFFICE OR BY CALLING THE AMERICAN DIABETES ASSOCIATION AT 1-800-232-6733.

SIMPLE CARB COUNTING IS EASY TO LEARN. AND, REMEMBER THE BENEFITS:

EAT MORE OF THE KINDS OF FOODS YOU LIKE

MAKE MEAL PLANNING EASIER, AND

IF YOU TAKE INSULIN, COUNTING CARBS IS A GOOD WAY TO BE SURE THAT YOU GET THE RIGHT AMOUNT OF INSULIN.

MILLIONS OF PEOPLE USE CARB COUNTING EVERY DAY TO HELP CONTROL THEIR DIABETES. YOU CAN TOO!

TALK TO YOUR DOCTOR, NURSE, OR DIABETES EDUCATOR FOR MORE INFORMATION!