#### Homemade Low Carb Pancakes

\*No hidden carbs, great flavor, and a texture that is very close to the real thing.\*

The recipe below takes one egg and makes 2 pancakes. Double or triple to make more,

### **Ingredients:**

2.5 tablespoons vanilla whey protein powder
3/4 teaspoons baking powder
1 egg
1 teaspoon vegetable oil
1 tablespoon sugar free syrup, flavor of choice
(Syrup Substitution: 1 teaspoon Splenda with 1/2
teaspoon vanilla and 1/2 tablespoon water)
2 tablespoons water

Mix dry ingredients in a bowl. Add the egg, oil, syrup or Splenda and water. If batter is too thick to pour easily, add another tablespoon or two of water to thin out. Stir. Fry in a pan or griddle as you would regular pancakes. Turn when bubbles appear at edges.

#### **Nutrition Facts:**

For two pancakes plus syrup: 1 g carb, 1 g fiber, 16 g protein, 14 g fat, 197 calories

#### References:

- 1.) Articlesbase. Whey Protein Facts-Your Guide to Whey Protein (2012)
- 2.) Luhovyy, B.L., Akhavan, T., and Anderson, G.H. Whey Proteins in the Regulation of Food Intake and Satiety (2007). Journal of the American College of Nutrition, Vol. 26, No. 6, 704S-712S
- 3.) Tang, J.E., Moore, D.R., Kujbida, G.W., Tarnopo;sky, M.A., and Phillips, S.M.. Ingestion of whey hydrolysate, casein, or soy protein solate: effects on mixed muscle protein synthesis at rest and following resitance exercise in young men (2009). Journal of Applied Physiology, 107:987-992
- 4.) Wikipedia: Whey Protein. http://en.wikipedia.org/wiki/Whey\_protein
- 5.) http://www.phlaunt.com/lowcarb/19060001.php
- 6.) http://www.webmd.com/food-recipes/protein

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### WHEY PROTEIN





It's not just for Building Muscle, Whey Protein is Beneficial for Overall Health.

Prepared by Dr. Janana J. Snowden Dr. Fatemeh Malekian, Dr. Bridget Udoh, Saleria Dumas and Anya Iford





### **WHAT IS PROTEIN?**

# Protein is an essential nutrient that the human body needs every day.

•It is made up of amino acids, which are considered the building blocks of life due to the many important functions that they serve throughout the body.

•These functions include building and repairing lean muscle, repairing cells within the body, and building and maintaining healthy bones.

•Some proteins are high quality proteins. These proteins contain 9 essential amino acids of the 20 amino acids found within the body. The body can't produce these essential amino acids on its own, therefore they must be consumed through diet.

### WHAT IS WHEY PROTEIN?

- There are two forms of protein found in cow's milk: casein protein and whey protein. The makeup of milk is 20% whey protein and 80% casein protein. Of the two, whey protein are higher quality proteins than casein.
- Compared to casein, whey proteins are more soluble. They include all of the required and supplementary amino acids/building blocks that the body needs, and are easily digested.

Whey and casein are considered "slow" and "fast" proteins, respectively. These proteins have been classified due to their rates of digestion. Milk allergies have been reported as being caused by whey proteins but the major allergens in milk are from casein proteins.

## HOW IS WHEY PROTEIN PRODUCED?

## Whey protein is produced during the cheese development process.

- The procedure begins when specific enzymes that are added to milk cause it to separate.
- Once separate, the curds are used for cheese making and the remaining liquid is the whey protein.
- The liquid whey is then pasteurized and dried into a powder for a variety of uses.

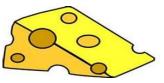
## HEALTH BENEFITS OF WHEY PROTEIN



Whey protein aids in:

- maintaining a healthy weight
- reducing appetite
- building and repairing lean muscle
- reducing muscle loss

### TASTE?



Whey protein has a clean, neutral flavor and adds little or no taste when added to food products. It dissolves easily in liquid and is not gritty.

## OTHER PROTEIN SOURCES

Protein quality varies among sources. Proteins which are considered high-quality sources include animal-based proteins such as meat, poultry, fish, eggs, milk, cheese, and yogurt. Plant foods containing protein consists of legumes, seeds, nuts, vegetables, and grain products.

# HOW MUCH PROTEIN DO WE NEED DAILY?

Protein requirements are complicated because the amount we need changes with age.

- Infants require about 10 grams a day.
- Teenage boys need up to 52 grams a day.
- Teenage girls need 46 grams a day.
- Adult men need about 56 grams a day.
- Adult women need about 46 grams a day.

One important exception is pregnant or lactating women, when the recommended intake rises to 71 grams of protein a day.