

Nutrition Session 1: What we are going to cover



MY NUTRITION BACKGROUND

- Certifications, experience and what we are going to cover
- Look at FIT CHICKS Food Philosophy

WHAT IS GOING ON IN THE WORLD WHEN IT COMES TO HEALTH

- Current state of obesity and disease in World
- What are eating disorders

BUSTING THE MYTHS ABOUT NUTRITION

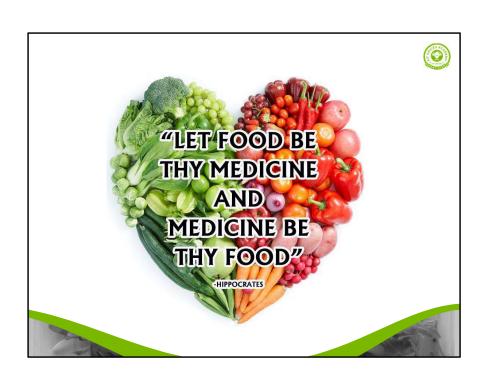
• What the lies we have been told!

NUTRITION LINGO

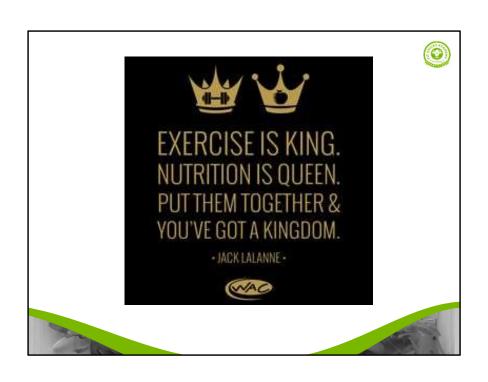
• Understand the terminology and nutrition 101

WHAT'S COMING UP THIS SESSION!

• Lets review your calendar. nutrition co-op, etc!







What you need before we start:



- 1. Water
- 2. Put your finger tips together
- 3. Take 3 deep breaths



My background in nutrition:

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And this is how I came to MY perspective on food, nutrition, lifestyle and more.... $% \label{eq:model} % \label{eq:model}$

- Nutrition Wellness Specialist with Can Fit Pro
- Culinary Nutrition Expert with Academy of Culinary Nutrition
- Registered Holistic Nutritionist
- Recovering from Bulimia Nervosa
- Seasoned Dieter (Low Fat, Paleo, Low Carb, Atkins, Vegetarian, etc)
- Fitness Competitor Prep







What is going on in the WORLD when it comes to health?



MORE ON DIABETES

https://www.who.int/news-room/fact-sheets/detail/diabetes

MORE ON HEART DISEASE

https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases-(cvds)

MORE ON CANCER

http://www.cancer.ca/en/cancer-information/cancer-101/canadian-cancer-statistics-publication/?region=on&gclid=COnmwu7Bv8UCFQgxaQodOhYABg



MORE ON DIABETES

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MORE ON HEART DISEASE

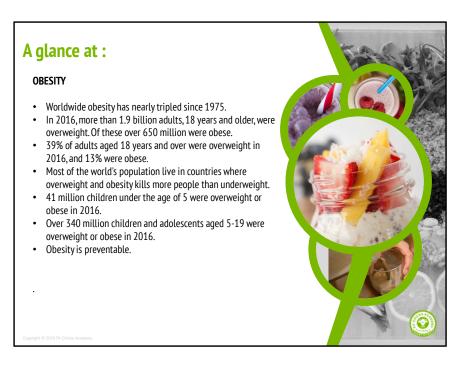
https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases-(cvds)

MORE ON CANCER

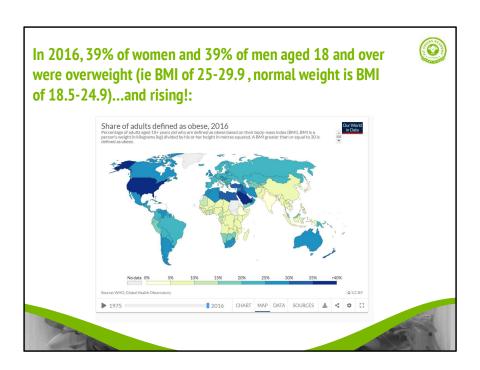
http://www.cancer.ca/en/cancer-information/cancer-101/canadian-cancer-statistics-publication/?region=on&gclid=COnmwu7Bv8UCFQgxaQodOhYABg



https://www.who.int/news-room/fact-sheets/detail/cancer



https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight



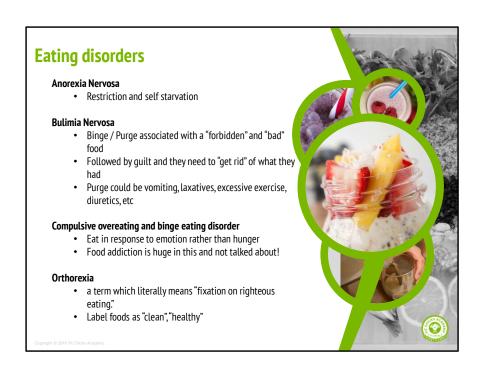
http://www.cbc.ca/news/business/canada-s-obesity-rate-higher-since-global-recession-oecd-1.2655646

- You can compare your BMI to this table to help you determine whether you're at a healthy weight.
 - Underweight = less than 18.5
 - Normal weight = 18.5-24.9
 - Overweight = 25-29.9
 - Obese = 30 or greater



So, what's all the fuss and concern? The fact is that obesity has health consequences. The complications resulting from obesity can have a considerable negative effect on the quality and length of a person's life. These complications can also have a significant impact on health care costs. People who are obese are at a higher risk of numerous illnesses, including heart attacks, strokes, diabetes, and more

 $http://bodyandhealth.canada.com/channel_section_details.asp?text_id=3347\&channel_id=1055\&relation_id=17810$



http://www.mckinley.illinois.edu/handouts/eating_disorders_disturbances.htm

What are the eating disorders? Anorexia Nervosa

Anorexia is a disorder that is characterized by self-starvation. Contrary to popular belief, many people with anorexia do eat every day, including "forbidden" foods such as candy, ice cream and cake. They generally eat only small amounts of food or severely restrict the foods that are "safe" to eat. The compulsive need to exercise often accompanies anorexia and can contribute to the dramatic level of weight loss. Most people with anorexia do not see how thin they are becoming. They sometimes see themselves as actually having gained weight! This is a result of their distorted and unrealistic body image.

Depression and anxiety are common in anorexia, as is withdrawal from family and friends. Denial of any changes in weight or weight loss is very common. Death can occur if anorexia goes untreated for extended periods of time. This is typically related to cardiac or kidney failure due to the malnutrition. Suicidal thoughts also occur in anorexia. Professional counseling and treatment is crucial to the survival and recovery of people with anorexia.

Bulimia

People with bulimia are involved in a binge-purge cycle of trying to control their weight and food intake. Bulimia is characterized by eating large amounts in a short period of time; often foods which are "forbidden" or "bad." This is followed by guilt, which results in an attempt to purge the food and calories from the body. Contrary to popular belief, not all bulimics will vomit as a method of purging. The abuse of laxatives, diuretics and/or enemas is also considered to be purging behaviors. Excessive exercise (most often done daily and for an hour or more) for the purpose of getting rid of calories is also considered to be a method of purging. As with anorexia, depression, anxiety and withdrawal occur in bulimia. Suicidal thoughts may also accompany the depression as well as social phobia and fear of humiliation. Denial of the eating problem or purging is common. Bulimia can also result in death if untreated. Professional counseling and treatment is a must to overcome the behaviors associated with bulimia.

Compulsive Overeating/Binge Eating Disorder

Many people eat in response to emotional rather than physical hunger. Compulsive eaters often feel a void in their lives, which leaves them feeling "empty." They may eat to attempt to fill this emptiness. Many people will choose "comfort" foods to fill emotional hunger. These are foods that we associate with childhood or other times when we felt emotionally safe and fulfilled. They may be foods that were given by caretakers as rewards or pacifiers. Weight management becomes difficult for the compulsive overeater. This can cause the person to resort to drastic diets or purging methods to compensate for the excessive food intake. Thus, compulsive overeaters can be at risk for developing bulimia.

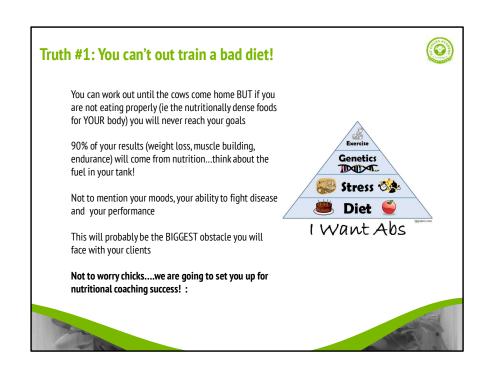
Many compulsive overeaters suffer from a lack of self-esteem. Behavior modification and other counseling techniques can be used to overcome the food addiction and to deal with the underlying feelings that cause the overeating



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DON'T EVER
UNDERESTIMATE THE
IMPACT THAT YOU
MAY HAVE ON SOMEONE
ELSE'S LIFE.
INSTAGRAM—THEGOGODOUTE



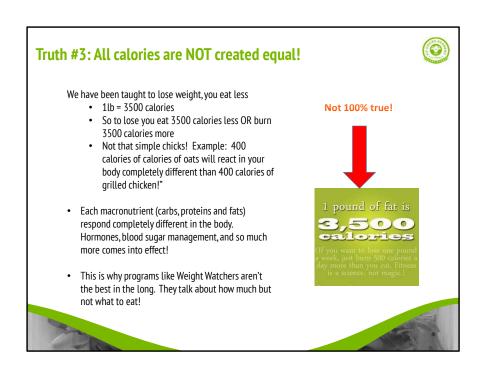


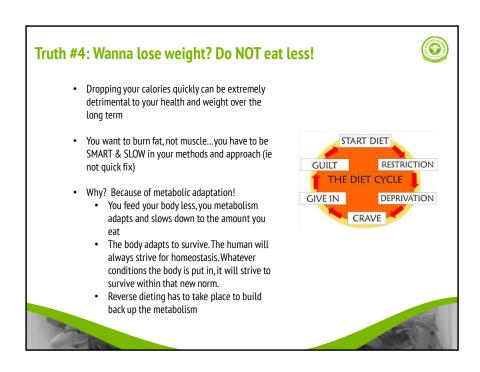




• Greek Yogurt is a great protein for everybody!

• Gluten Free = yay!





Article: Prevent a slowing metabolism:

https://www.muscleandstrength.com/articles/prevent-slowing-metabolism

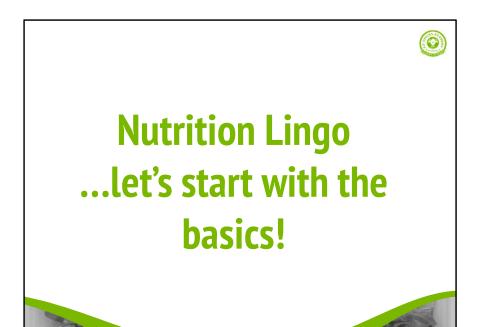
Why A Slowing Metabolism Happens

Let's clear one thing up right now. It is normal for the metabolism to slow down on any diet or calorie restriction. This is all due to metabolic adaptation. For a successful prep you need to understand how the body adapts to survive. The human body is an amazing adaptive machine that will always strive for homeostasis. Whatever conditions the body is put in, it will strive to survive within that new norm. If you remember our bodybuilder in the previous example, he was eating 3000 calories a day to maintain his weight but he cut to 1600 to lose fat. As soon as he cuts calories his metabolism will begin to slow. Many people do not realize that the body uses calories just digesting and processing food. This is described as the thermic effect of food. So the simple act of eating less causes less energy output. Once the body senses that fat loss is occurring it will begin to lower thyroid levels and diminish nervous system output in an effort to stop the weight loss. Once further calorie cuts are made and cardio is increased fat loss will resume again, but the body will further lower thyroid levels and nervous system output. It will also lower testosterone levels and raise cortisol levels, which will eventually lead to

muscle loss. Since muscle is metabolically active tissue, meaning it requires calories simply to exist, the metabolism will drop even further.

So why does the body sabotage our effort like this? It is simple...survival. If the body did not make these changes it would be in serious trouble. If our bodybuilder eating 3000 calories a day cut his calories to 2500 per day and his body did not have these adaptive abilities, he would lose weight continually without stopping until he would eventually die. Luckily nobody is starving to death on 2500 calories per day (even though it may feel like it sometimes). So you see, these are normal adaptations that are necessary for survival.

Always remember that as soon as you make a change that will affect calorie intake or expenditure your body will immediately begin taking measures to reach homeostasis.



Macronutrients

NUTRIENTS

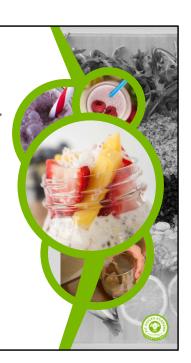
- Nutrients are substances needed for growth, metabolism, and for other body functions.
- There are 2 types: macronutrients & micronutrients

MACRONUTRIENTS

- Macronutrients are nutrients that provide calories or energy and we need for survival.
- There are three macronutrients:
 - 1. Carbohydrate
 - 2. Protein
 - 3. Fat

Need to remember? Think "macro" means large ie macronutrients are nutrients needed in large amounts.

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WHAT ARE MACRONUTRIENTS?

Macronutrients are nutrients that provide calories or energy. Nutrients are substances needed for growth, metabolism, and for other body functions. Since "macro" means large, macronutrients are nutrients needed in large amounts. There are three macronutrients:

Carbohydrate

Protein

Fat

While each of these macronutrients provides calories, the amount of calories that each one provides varies.

Carbohydrate provides 4 calories per gram.

Protein provides 4 calories per gram.

Fat provides 9 calories per gram.

This means that if you looked at the Nutrition Facts label of a product and it said 12 grams of carbohydrate, 0 grams of fat, and 0 grams of protein per serving, you would know that this food has about 48 calories per serving (12 grams carbohydrate multiplied by 4 calories for each gram of carbohydrate = 48 calories).



http://study.com/academy/lesson/what-are-micronutrients-definition-types-foods-importance.html

Vitamins and **minerals** are the two types of micronutrients. While only needed in small amounts, they play important roles in human development and well-being, including the regulation of metabolism, heart beat, cellular pH and bone density.

Types of Micronutrients

Vitamins

Vitamins are available in two forms: **water soluble** and **fat soluble**. Water soluble vitamins include the B-complex vitamins and Vitamin C. Vitamins B6 and B12 are two of the most well-known B-complex vitamins. Water soluble vitamins are easily lost through bodily fluids and must be replaced each day. The fat soluble vitamins are A, D, E and K. Since they are not lost as easily as their water soluble counterparts, fat soluble vitamins tend to accumulate within the body and are not needed on a daily basis.

Minerals

Minerals are also available in two forms: **macrominerals** and **microminerals**. Macrominerals are needed in larger amounts and include the following:

Calcium

Magnesium

Phosphorus

Sodium

Potassium

Microminerals are only needed in trace amounts and include the following:

Iron

Copper

Iodine

Zinc

Fluoride



the energy needed to raise the temperature of 1 gram of water by 1 $^{\circ}$ C (now usually defined as 4.1868 joules)

Carbohydrate provides 4 calories per gram.

Protein provides 4 calories per gram.

Fat provides 9 calories per gram.

Example: Look at Nutrition Facts label of a product and it said 12 grams of carbohydrate, 0 grams of fat, and 0 grams of protein per serving, you would know that this food has about 48 calories per serving (12 grams carbohydrate multiplied by 4 calories for each gram of carbohydrate = 48 calories).

Only other substance to provide calories is alcohol with 7 calories per gram. Alcohol is not a macronutrient as we do not need to survive.



http://www.mckinley.illinois.edu/handouts/macronutrients.htm

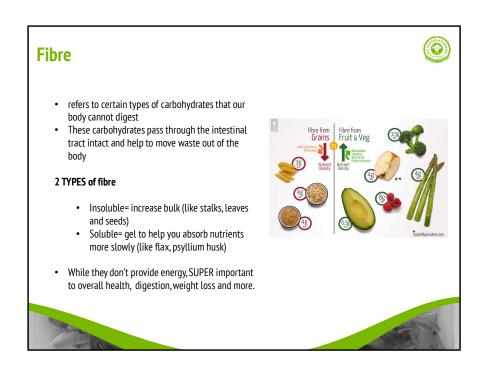
WHY DO WE NEED CARBOHYDRATES?

Carbohydrates are the macronutrient that we need in the largest amounts. According to the Dietary Reference Intakes published by the USDA, 45% - 65% of calories should come from carbohydrate. We need this amount of carbohydrate because:

- Carbohydrates are the body's main source of fuel.
- Carbohydrates are easily used by the body for energy.
- All of the tissues and cells in our body can use glucose for energy.
- Carbohydrates are needed for the central nervous system, the kidneys, the brain, the muscles (including the heart) to function properly.
- Carbohydrates can be stored in the muscles and liver and later used for energy.
- Carbohydrates are important in intestinal health and waste elimination.
- Carbohydrates are mainly found in starchy foods (like grain and potatoes), fruits, milk, and yogurt. Other foods like vegetables, beans, nuts, seeds and cottage cheese contain carbohydrates, but in lesser amounts.

Fiber refers to certain types of carbohydrates that our body cannot digest. These

carbohydrates pass through the intestinal tract intact and help to move waste out of the body. Diets that are low in fiber have been shown to cause problems such as constipation and hemorrhoids and to increase the risk for certain types of cancers such as colon cancer. Diets high in fiber; however, have been shown to decrease risks for heart disease, obesity, and they help lower cholesterol. Foods high in fiber include fruits, vegetables, and whole grain products.



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WHY DO WE NEED PROTEIN?

According to the Dietary Reference Intakes published by the USDA 10% - 35% of calories should come from protein. Most Americans get plenty of protein, and easily meet this need by consuming a balanced diet. We need protein for:

- Growth (especially important for children, teens, and pregnant women)
- Tissue repair
- Immune function
- Making essential hormones and enzymes
- Energy when carbohydrate is not available
- Preserving lean muscle mass
- Protein is found in meats, poultry, fish, meat substitutes, cheese, milk, nuts, legumes, and in smaller quantities in starchy foods and vegetables.

When we eat these types of foods, our body breaks down the protein that they contain into amino acids (the building blocks of proteins). Some amino acids are essential which means that we need to get them from our diet, and others are nonessential which means that our body can make them. Protein that comes from animal sources contains all of the essential amino acids that we need. Plant sources of protein, on the other hand, do not contain all of the essential amino acids.



WHY DO WE NEED FAT?

Although fats have received a bad reputation for causing weight gain, some fat is essential for survival. According to the Dietary Reference Intakes published by the USDA 20% - 35% of calories should come from fat. We need this amount of fat for:

- Normal growth and development
- Energy (fat is the most concentrated source of energy)
- Absorbing certain vitamins (like vitamins A, D, E, K, and carotenoids)
- · Providing cushioning for the organs
- Maintaining cell membranes
- Providing taste, consistency, and stability to foods

Fat is found in meat, poultry, nuts, milk products, butters and margarines, oils, lard, fish, grain products and salad dressings. There are three main types of fat, saturated fat, unsaturated fat, and trans fat. Saturated fat (found in foods like meat, butter, lard, and cream) and trans fat (found in baked goods, snack foods, fried foods, and margarines) have been shown to increase your risk for heart disease. Replacing saturated and trans fat in your diet with unsaturated fat (found in foods like olive oil, avocados, nuts, and canola oil) has been shown decrease the risk of developing heart disease

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Nutrition Session 1: Recap

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BUSTING THE MYTHS ABOUT NUTRITION

• What the lies we have been told!

NUTRITION LINGO

• Understand the components of a personal training program

WHAT'S COMING UP THIS SESSION!

• Lets review your calendar. nutrition co-op, etc!



Any questions or inquiries, please email:

fne@fitchicks.ca

Let's have an amazing journey ahead!