Healthy Habit Heroes

Weightloss Webinar

NUTRITION

THE FACTS

dietflex

life

MACRONUTRIENTS

Macro means large, so macronutrients are the nutrients required in large amounts and which provide energy. They are needed for growth, metabolism and all body functions.

The three macronutrients are protein, carbohydrate and fat.

PROTEIN

Protein is primarily required for growth, tissue repair, immune function, and enzyme and hormone production. It is found in meat, fish, poultry, eggs, dairy products, nuts, legumes and in small amounts in vegetables and starchy foods.

When eaten, the body breaks protein down into amino acids, which are the building blocks of protein. Some amino acids are essential, meaning that the body cannot make them so they must be obtained through dietary sources, and some are non-essential, meaning that our body can make them.

Animal proteins (such as meat, dairy etc) contain all essential amino acids. Plant proteins (such as legumes, vegetables) do not contain all essential amino acids.

CARBOHYDRATE

Typical eating guidelines suggest that we need large amounts of carbohydrate however, unlike protein and fat, there are no essential carbohydrates. What this means is that the body can utilise other nutrients to perform all functions that carbohydrates would usually perform. This is not to say that we shouldn't eat any carbs, just that they are not essential.

Carbohydrates are broken down in the body to sugar, which is used for energy. Energy is required for daily activities and also for organ and central nervous system functions.

Carbohydrates are broken down to three different sugars, the monosaccharides glucose, fructose and galactose. In foods, these monosaccharides may occur alone or they may be combined as disaccharides including lactose, maltose, sucrose, lactulose, trehalose and cellobiose.

The fibre contained in carbs is important for intestinal health and elimination. It is found in grains, vegetables, fruit, dairy foods, beans and legumes.

FAT

Fat is required for normal growth and development, absorbing the fat-soluble vitamins, maintaining cell membranes, for energy, and providing cushioning for the organs. Fat is found in meats, dairy, oil, butter, nuts, some fruit (avocadoes and olives), seeds, and grains.

Fats are broken down in the body to fatty acids. The two essential fatty acids, linoleic acid (Omega-6) and alpha linolenic acid (Omega-3), cannot be produced in the body. Other fatty acids are not essential to life but can certainly improve the health of your body.

Depending on the specific chemical structure of the fatty acid, they might be monounsaturated, polyunsaturated or saturated. All are necessary in a healthy diet.

Monounsaturated fats may be solid or liquid at room temperature. Olive oil and avocadoes are both good sources.

Polyunsaturated fats are liquid at room temperature. Oily fish and seeds are good natural sources.

Saturated fatty acids are solid at room temperature. Coconut and butter are good sources.

MICRONUTRIENTS

Micro means small, so micronutrients are nutrients that are necessary in small amounts in the body. Micronutrients include the range of vitamins and minerals.

Vitamins are organic compounds that cannot be synthesised by the body, so dietary sources are necessary.

* Refer to Attachment A: Vitamins

MINERALS

Dietary minerals are required in small amounts to ensure optimal body functioning.

* Refer to Attachment B: Minerals

DRINKS

WATER

Water is required for rehydration, proper cellular, organ, enzyme and hormone production, and the simple fact is that if we go longer than a day or two without water, we die. It can also help act as an appetite suppressant, filling you up so that hunger can be delayed.

The bonus of drinking plenty of water each day is that our skin is more hydrated (no more croc-skin!) and the fine skin around the eyes appears less wrinkled.

Adequate water also helps maximise our muscle strength, which means we exercise more easily and our metabolism is more revved up.

Plain, unflavoured water is best. Most flavoured waters contain sugar or sugar substitutes, which will slow or stop weight loss.

ALCOHOL

Alcohol provides a source of energy which can't be stored in the body. When we drink alcohol, our blood alcohol levels rise and the only way to bring them down is to metabolise the alcohol. The time taken to do this depends on the individual's metabolic rate and the amount of alcohol consumed, and may be influenced by the amount of activity the person engages in after drinking.

Alcohol does not affect satiety, so when you drink alcohol you're likely to eat as much – or more – food because your impulse control is inhibited and so over-eating is more likely. It's also harder to say no to the foods you would normally pass on.

Alcohol suppresses the oxidation of fat: when you drink alcohol you can't lose body fat until all of the alcohol is out of your system. The occasional drink may be fine and you may be happy to live with the consequence, but most people would rather lose weight in the quickest time possible. If that's you, avoid alcohol.

SOFT DRINKS AND JUICES

Regular soft drinks are simply carbonated flavoured sugar-water. They add energy to your diet but provide little towards satiety and they have no other nutritional value. Put simply, soft drinks simply add calories and stop weight loss.

Soft drinks have been linked to depleted levels of Vitamin A, calcium and magnesium in the body, all of which impact on body functions and inhibit weight loss.

Diet soft drinks can be just as harmful as regular for weight loss. Some research suggests that artificial sweeteners signal the brain to crave extra food, so cutting all soft drinks out of your regular eating plan will reap benefits.

Many people feel that fruit juice is a good option. The logic is that fruit is healthy, therefore juice must be healthy. Unfortunately, juice is a concentrated form of sugar; fruit with the fibre removed. The amount of sugar in a glass of juice is the equivalent of 3 to 8 pieces of fruit, depending on the size of the glass. Most people would not sit down and eat that many pieces of fruit – the fibre makes it too filling – but instead can down a glass of juice in no time and still eat a full meal. For best weight loss results, avoid fruit juice completely.

Many people think that sugar is good when they're exercising, but it causes a rise in blood glucose which in turn causes the fat storage hormone, insulin, to rise. Insulin transports the glucose to storage, which makes blood glucose levels plummet and fatigue and low energy follows. So the reason people consume sugar prior to exercise is for energy, but the result is actually the opposite.

ELECTROLYTE DRINKS

If you believe the advertising hype, everybody who exercises needs to replace the electrolytes lost through their efforts. Great marketing, but how true is it?

When we exercise we sweat. Sweat contains water and electrolytes such as sodium and chloride, which need to be replaced in order to get rehydrated more quickly. So the real problem for most people is in the water we lose, not in the electrolytes.

Electrolyte drinks do add electrolytes and water, but they are also flavoured (so that we want to drink them, and drink them often) with sugar. This is just bad news for your weight loss.

If you're exercising strenuously for hours on end, an electrolyte drink is a good idea. If, like most of us, your exercise session lasts 30 to 60 minutes, good old water will be perfect for rehydration and will support your weight loss efforts.

COFFEE, TEA & OTHER CAFFEINATED DRINKS

There is no well-conducted research which clearly proves the effect of caffeine on weight loss or weight gain. Despite this, there are some factors to bear in mind.

How do you have your coffee? Grande café latte with two sugars is not likely to do your weight loss any good, whereas a small long black will cause less or no problem. Caffeinated soft drinks also contain sugar or artificial sweeteners, so these are best avoided.

Tea, including green tea, has almost as much caffeine as coffee, depending on how you make it, so be aware for the potential downsides with tea as well as coffee. If you like your tea very weak you're unlikely to be getting a big hit of caffeine, but those who like it strong need to limit the amount consumed. Non-caffeinated herbal teas can be a good option, as can decaf coffee.

One coffee or tea in the morning probably won't do much harm, but 6 or 8 throughout the day might.

Caffeine is a stimulant which can increase metabolic rate, and can cause or contribute to nervousness, nausea, increased blood pressure, and a range of other problems.

One of the worst is insomnia, as the research is clear that poor or interrupted sleep will sabotage weight loss.

In short, if you enjoy a caffeinated drink then have it as long as it doesn't cause any problems, including sabotaging your weight loss.

WHAT CAN YOU DO NOW?

You now have the tools to identify any areas in your meals, snacks, drinks, or even in your unconscious grazing, where you could make some changes to improve your results. Once identified, establish a strategy to overcome the problem. Talk to your family members about how they can help.

Surround yourself with the support that's so essential in making choices which help you move toward your ultimate weight, fitness and health goals.

SOME SUGGESTIONS FOR A CHALLENGE THIS WEEK:

- No lollies or sweets.
- If you feel like something sweet, try 75 or 85% cocoa dark chocolate.
- Say NO to cakes, biscuits, pastries.
- Try a small serving of nuts and/or cheese if you need a snack.

NOTES

ATTACHMENT A: VITAMINS

VITAMIN A - RETINOL, RETINAL, CAROTENOIDS	
Needed for:	Maintaining normal reproduction; Good vision; Formation and maintenance of healthy skin, teeth and soft tissue; Immune function
Key sources:	Milk, cheese, eggs, fatty fish, yellow-orange vegetables and fruits (eg apricots, carrots, mango, pumpkin), and other vegies such as spinach and broccoli

VITAMIN B1 - THIAMINE	
Needed for:	Supplying energy to tissues; Breaking down and using the energy and nutrients in carbohydrates, proteins and fats; Nerve function
Key sources:	Legumes, nuts, pork, whole grains, yeast

VITAMIN B2 - RIBOFLAVIN	
Needed for:	Obtaining energy from food; Activating Vit B6 in the body; Reducing cardiovascular risk factors; Production
Key sources:	Milk, cheese, yoghurt

VITAMIN B3 - NIACIN, NIACINAMIDE	
Needed for:	Obtaining energy from food; Utilisation of macronutrients; Maintain healthy skin and nerves; Releasing calcium from cellular stores
Key sources:	Beef, pork, liver, beans, whole grains, eggs, milk

VITAMIN B5 - PANTOTHENIC ACID	
Needed for:	Making hormones, vitamin A & D; Help nerve function; Helps making new fats and proteins in the body
Key sources:	Chicken, beef, potatoes, oats, tomatoes, egg yolks, whole grains

VITAMIN B6 - PYRIDOXINE, PYRIDOXAMINE, PYRIDOXAL	
Needed for:	Break down, utilise and rebuild proteins
Key sources:	Meat and organs, Brussels sprouts, peas, beans, split peas, fruit

VITAMIN B7 - BIOTIN	
Needed for:	Break down and utilise fats and proteins
Key sources:	Meats and cereals

VITAMIN B9 - FOLIC ACID, FOLINIC ACID	
Needed for:	Break down and utilise proteins; Assist tissue growth and cell function; Maintain good heart health; Prevent neural tube defects in newborns
Key sources:	Leafy vegetables, whole grains, liver, oranges

VITAMIN B12 - CYANOCABALAMIN, HYDROXYCOBALAMIN, MATHYLCOBALAMIN	
Needed for:	Normal nerve function; Normal blood function
Key sources:	Beef, lamb, fish, veal, chicken, eggs, milk and other dairy

ATTACHMENT A: VITAMINS

VITAMIN C - ASCORBIC ACID	
Needed for:	Protects against oxidative damage; Aids absorption of iron and copper; Formation of collagen; Healthy bones; Fights infection; Helps regenerate and stabilise other vitamins
Key sources:	Blackcurrants, citrus fruits, kiwifruit, raspberries, capsicum, broccoli, sprouts

VITAMIN D - CHOLECALCIFEROL	
Needed for:	Absorption of calcium and phosphorous; Maintenance of calcium levels in the blood; Immune function; Healthy skin; Muscle strength
Key sources:	Sunlight on the skin allows the body to produce Vitamin D. Minor dietary sources are available in oily fish and eggs

VITAMIN E - TOCOPHEROLS, TOCOTRIENOLS	
Needed for:	Normal blood clotting
Key sources:	Spinach, salad greens, cabbage, broccoli, Brussels sprouts

VITAMIN K - PHYLLOQUINONE, MENAQUINONES	
Needed for:	Normal blood clotting; Synthesis of proteins
Key sources:	Leafy greens, egg yolks, liver

ATTACHMENT B: MINERALS

CALCIUM	
Needed for:	Development and maintenance of bones and teeth; Functioning of muscles and nerves; Heart function
Key sources:	Dairy, bony fish, legumes

CHLORIDE	
Needed for:	Delivers nutrients to cells; Aids in balancing water levels around cells; Kidney function; Digestion
Key sources:	Found primarily in salts that are in a normal diet

CHROMIUM	
Needed for:	Assists insulin in regulating blood glucose
Key sources:	Eggs, meat, whole grains, cheese

COPPER	
Needed for:	Enzyme function; Formation of connective tissue; Iron metabolism and blood cell formation; Nervous, immune and cardiovascular system function
Key sources:	Organ meats, seafood, nuts, seeds, whole grains

FLUORIDE	
Needed for:	Healthy bones and teeth
Key sources:	Fish, tea, fluoridated water

IODINE	
Needed for:	Normal thyroid function; Energy production; Cellular oxygen consumption
Key sources:	Salt-water fish and shellfish, vegetables (if iodine was present in the soil), iodised salt

IRON	
Needed for:	Haemoglobin in red blood cells for oxygen transport; Component of muscle protein
Key sources:	Meat, poultry, fish, whole grains

MAGNESIUM	
Needed for:	Functioning of over 300 enzyme systems; Energy production; Regulating potassium levels; Use of calcium; Healthy bones
Key sources:	Green vegetables, legumes, peas, beans, lentils, nuts, whole grains

MANGANESE	
Needed for:	Healthy bones; Carbohydrate, protein and cholesterol metabolism
Key sources:	Whole grains, tea, vegetables

ATTACHMENT B: MINERALS

MOLYBDENUM	
Needed for:	Breakdown of proteins
Key sources:	Legumes, whole grains, nuts

NICKEL	
Needed for:	Absorption of iron; Strengthens bones; Breakdown of glucose; Helps create energy; Contributes to the production of certain enzymes
Key sources:	Nuts, peas, beans, grains, fish, oats

PHOSPHOROUS	
Needed for:	Forms part of DNA and RNA; Buffers the acidity of urine; Protection of acid/base balance of blood; Storage and transport of energy; Helps activate some proteins
Key sources:	Widely available in natural foods such as dairy, meat, dried fruit, eggs, whole grains

POTASSIUM	
Needed for:	Nerve impulses; Muscle contraction; Regulates blood pressure
Key sources:	Leafy green vegetables, tomatoes, cucumbers, zucchini, eggplant, pumpkin, root vegetables, beans, peas, bananas, avocadoes, milk, yoghurt

SELENIUM	
Needed for:	Antioxidant; Thyroid metabolism; Part of several functional proteins in the body
Key sources:	Seafood, poultry, eggs, meats, whole grains

SODIUM	
Needed for:	Maintain water balance in the body; Nerve impulses; Transport of molecules across cell walls
Key sources:	Most take-away and processed foods, bread, butter, cheese, cereals, table salt and sea salt

ZINC	
Needed for:	Component of enzymes that help maintain the structure of proteins and regulate gene expression; Growth; Immunity; Appetite; Skin integrity
Key sources:	Meats, fish, poultry, dairy foods, cereals