

Ep 4: Diet & the Cardiovascular Disease

Gwynneth: Hello! Welcome back to Episode 4 of the MMI Podcast : Medicine & Wellness! I'm Gwynneth, **and I'm Amelia**, and we will both be hosting today's episode.

Amelia: Yes! I'm so excited!

Gwynneth: Did you enjoy our previous episode on "Why diets don't work?" what do you think about it?

Amelia: It's a great talk! After listening to the previous episode, I have a clearer view on the holistic approach in achieving a successful diet. Besides taking care of the mental health, like what Ceymone has mentioned, diet varies according to each individual, so it is very important to find the type of diet that suits you most. {yeah, exactly} Anyways, let's focus on today's episode! So, what will we be talking about today?

Gwynneth: Have a guess! You know what, i'll give you a hint... that is....Ms Ceymone is back with us today for another episode! She is a clinical dietician who is currently working at the nutrafits, who is also a graduate from International Medical University with great clinical experiences!

Amelia: Since we are having a dietitian today, I'm sure our topic today will revolve around diet. So it's... diet AND....

Gwynneth: yesss, you are almost there, DIET AND THE CARDIOVASCULAR DISEASE !

Amelia: Wow! Nice to have you back with us again, Ceymone!

Ceymone: Hi! Thank you for having me again!

Gwynneth: Okay, so as we know, cardiovascular disease (CVD) is one of the top killer diseases not only in Malaysia, but worldwide too. There are several risk factors , for example, hypertension, smoking, or a strong family history of heart disease can cause an individual to suffer from these diseases. Do you know that nutrition can actually affect CVD directly by contributing to the accumulation of vascular plaques? Of course, there are medications and surgical interventions to counter this problem, however, we should never neglect the dieting aspect in part of the management!

Ceymone: Yeah sure let's dive right into the topic. Yes food is highly involved as one of the risk factors of heart health. By paying attention to what we eat is one of the most important preventive measures we can do. So a diet consisting of high amounts of fat and cholesterol can cause our blood cholesterol to rise, increasing the risk of fatty deposits to build up and increase the rate of heart attacks.

Amelia: Oh... Speaking of which, I believe that many people might be confused with the terms 'fat' and 'cholesterol' as they seem alike and interchangeable. However, they are different. Can you please explain briefly on this and give our listeners suggestions on the right intake of cholesterols?

Ceymone: Yes, sure. Well many people kinda get confused when it comes to the different types of fat out there, and what is cholesterol, and what is this what is that. So when it comes to fat, it is a very important macronutrient in our body. However, it gets a bad reputation even though we need to eat them everyday. So finding a right and balanced intake of fat is essential too. Too much or too little does affect our health. So you might be wondering, is fat really that important for our body? Yes, they are. Dietary fats provide energy, support cell growth, they help to protect our organs, store fat soluble vitamins, regulate and produce hormones too. So definitely, your body needs them. So back to the question on the differences between fat and cholesterol, there are four major dietary fats in food sources. The very first one is called saturated fat. Secondly, trans fat. Third is monounsaturated fat and lastly, polyunsaturated fat. So these four fats have different chemical structures and physical properties. So how do you tell them apart? Saturated fat and trans fat are normally foods that are solid at room temperature, for example, butter; while monounsaturated and polyunsaturated fats are normally liquid form at room temperature, for example, vegetable oil. So when it comes to cholesterol, it is actually a waxy substance found in foods we eat and in our body cells. So our body also needs some cholesterol to function normally. And there are three types of cholesterol in our body. The short forms of all these are HDL, LDL and VLDL. There is another type of fats that you normally see in lab tests which are called triglycerides. So this is a specific type of fat where it indicates a high triglyceride level may be a sign of excess body fat or an increased risk of Type 2 Diabetes. It may also be a signal that you are consuming too much calories especially from refined foods or drinks and beverages with added sugars. So what is the relationship between cholesterol and heart diseases? So cholesterol can actually join with other substances to form a thick hard deposit on the inside of our arteries. This can narrow the arteries and make them feel less flexible. If a blood clot is formed, or blocks, one of these will narrow the arteries, a heart attack or stroke can happen. So high cholesterol is one of the major controllable risk factors for any heart diseases. So if one of the risk factors other than just high cholesterol such as smoking, high blood pressure, diabetes, a very bad lifestyle, the risk of having all these heart diseases actually increases. So the more risk factors, the more severe they are, and the more likely these risks compounded.

Gwynneth: Yeah I agree with you. often in the clinical setting, besides medications, we have to also advise patients on their food intake. There are also unavoidable occasions where they have to eat outside and there wouldn't be food available that fits their health preference. So, Ceymone, would you like to share with us how you would educate or manage the diet of these patients who are suffering from heart diseases?

Ceymone: Yes, okay. So I actually have three main points when it comes to managing heart diseases. The very first one is to limit the intake of high fat and high cholesterol food. Secondly is to limit sodium intake. And lastly, is to ensure sufficient intake of water. So let me go through each main point in detail on how you can actually properly manage all these three aspects.

Going back to the first one which is limiting the intake of high fat and high cholesterol foods. So these foods are normally found in the skin of the fat from meats, red meats, or you can look at butter, processed meats, organs or shellfish. So we have to remember to choose the food that provides good fats. Aiming for a dietary pattern that consists of vegetables, fruits, whole grains, low fat dairy, selecting lean meats, fish and nuts. So how should we apply this in our daily lives? For example, when we are eating out, and you see all those very very delicious foods and go like “Oh my gosh”, which are the ones that are - One : tastes good and two : less in fat? So we take a look at the menu, and we choose the dishes based on their cooking methods. For example, when you look at the menu, they will actually describe how the food is actually prepared, so you can choose from the option that is baked, steamed, soup-based, boiled, grilled, broiled or stew. Or, let’s say that they do not have the description in the menu, for example, if you go to the mixed rice stall, and there are so many food options but you are not sure which foods are high in fats or high in calories, so choose the food with the least shine or gloss on it. Because normally the shiniest food contains the highest amount of fat, or the food that is extra crispy and crunchy, those also contain high salt and high in fat. Moving on, when you are cooking at home or preparing food, how can you actually reduce high fat and cholesterol? One is to change your cooking method that requires less oil, referring back to the cooking methods I have mentioned previously. Or, you can use a non-stick pan. When you use a non-stick pan, it requires less oil as well when you cook. And when you are preparing meat, it’s best to remove the fat and skin from the meats, for example, chicken or poultry. You can also use vegetable oil such as olive oil, canola oil and sunflower oil. And when you cook very delicious curries, instead of using santan, you can replace it with milk, or use half santan with half milk, as long as you are reducing the fat and cholesterol. The other way to reduce fat, when you are cooking food high in oil, you can actually take a kitchen towel and drain the excess oil.

And moving on, is the recipe modification. If there are listeners out there who love to cook, there are also ways to reduce the fat in high fats food. First is to replace the santan with milk or low fat yogurt when you cook. Secondly, when you go out, for the dairy products that you buy, choose low fat milk instead of full cream milk. Next is to look at the food labels and avoid the word ‘trans fat’. Or if you are a butter fan, you can swap out butter or lard with healthy vegetable oil. Instead of eating kuih or curry puffs very often, you can limit the intake and replace it with fruits, nuts and seeds.

Moving on to limiting the sodium intake. Why is sodium important? When there is extra sodium in your bloodstream, it pulls the water into your blood vessels, therefore increasing the volume of the blood inside them. With more blood flowing through your blood vessels, the blood pressure increases. It's like turning the water supply of your garden hose when you turn on the tap. The pressure of the hose will increase as more water is flushed through. So, overtime, high blood pressure will overstretch or injure your blood vessel walls and it speeds up the buildup of those gunky plaques that can block blood flow. This added pressure will tire up the heart and force it to work harder to pump blood through the body. So how do we overcome or limit our sodium intake is also based on how we eat out or prepare our food and picking the right type of food. When we eat out, what I will suggest is to choose healthy cooking methods as I have mentioned before. Secondly, is to reduce the intake of condiments such as tomato or chili sauce, budu, belacan or kicap. Those foods actually contain high sodium. Or better yet, reduce the times of eating out because most foods sold outside are normally high in sodium. That is why they taste so amazing! And when we prepare food at home, I encourage you to reduce the usage of salt when you cook. So during food preparation, it is to reduce the usage of salt during cooking. Then, you might be wondering : How am I gonna make the food delicious and flavourful without adding salt? Well, you can replace it with spices or herbs such as onion, shallots, lime, lemongrass, garlic, kunyit, powders, oreganos, thyme, pepper, and the list goes on. Just based on the recipes you have in mind, you can just add in all these little spices and herbs, and make your dish extra yummy. Secondly is to limit the intake of canned foods and salted foods such as salted eggs, salted fish. And then limit the intake of processed meats and added flavouring such as stock cubes, belacan, cincalok, kicap and budu. So when we go grocery shopping, it's also to pick out the right kind of snacks when we go buy our groceries. First of all is to reduce the intake of packaged snacks such as chips. Or if you go outside to buy our snacks, it is also to reduce the intake of keropoks, kerepeks or salted nuts. Secondly is to replace it with fresh fruits or foods with no added salt. So you can actually take a look at the food label, if it says it is 'no added salt', that's a good option. And thirdly is to read the food labels at the ingredient list to find the hidden names of salt. They come in very different names, they can come as sodium alginate, sodium sulphate, sodium caseinate, monosodium glutamate and sodium citrate. The list goes on but when you see the word 'sodium', it is most probably a food that contains salt. And lastly is to look out for food labels that say 'low sodium', 'low salt' or 'salt-free'. Those are the foods I would highly recommend that we can buy and snack on.

Lastly, it is to ensure sufficient intake of water, meaning, at least 8 glasses of water a day. To keep your body hydrated. To help the body to pump more blood easily, and allow oxygen to enter the muscles and work efficiently. If the body is dehydrated, the blood retains more sodium therefore thickening it and making it harder for the blood to flow around the body.

Amelia: Wow, thank you for all those suggestions from you Ceymone! So, I suppose that, besides fat, sodium, and water, we can't neglect fibre from a healthy diet too, right?

Ceymone: Yes, fibre is definitely heart healthy. Not only it has the function to maintain our bowel health, by having fibre intake, it helps to lower the cholesterol levels and better control blood glucose levels too! So, soluble fibres may help in lowering the total cholesterol and LDL levels in the body. Studies have also shown that high fibre foods may have other heart health benefits as well such as reducing blood pressure and inflammation. So one tip is to incorporate as many fibre rich foods into your diet such as swapping out certain foods that you normally eat. For example, when you eat white rice, you can replace it with brown rice. Or, when it comes to white bread, you can replace it to wholemeals. Biscuits as well, if you read the food labels, it says 'wholemeal' or 'whole grain', those are very good options. Or if you are a home baker, if you normally use plain flour, you can replace it with whole-wheat flour or wheat flour. And if normally you go to mamaks, you eat rotis, plain roti, you can also replace it with chapati. Lastly, if you prepare fruit juices, you can also replace it with actual fruits because when you make fruit juices, you tend to take away the fibres and just drink the juice only. But I wouldn't recommend you to completely swap out if you're not comfortable with it. Just slowly make small changes as in your diet. It is recommended to have 5 to 7 servings of fibre rich foods. For example, in a day, you can have a combination of different servings of vegetables, fruits, legumes and whole grain foods.

Gwynneth: Oh.. so we must always remember to have fibre in our diet! So Ceymone, there's one Malaysian study suggesting that fats are actually not the major heart disease culprit, instead it is actually the high proportions of carbohydrates that tend to elevate multiple cardiovascular risk factors. And this has been relating to the higher mortality rate of cvd due to added sugar.

Ceymone: It is true high intakes of carbohydrates can lead to elevated triglyceride levels. However, this study is actually really amazing. It changes the ballgame of us to view heart health differently. But, this is just a cross-sectional study, and we cannot make a definite decision based on a single research as a guideline. So it is best to follow guidelines or CPGs which consist of a compilation of various studies. But this does not mean we should avoid completely eating carbs. They play an important role in providing us energy and containing important nutrients for our body as well! It is how we balance our macronutrients intake because each macro plays an important role in our overall health. So we need to learn how to fit a balanced amount of each macro in our diet.

So when it comes to eating carbohydrates, here are three simple suggestions that we should be mindful of. First is to limit food that is high in processed with fine carbohydrates. They are normally foods that are high in calories and low in nutrition such as donuts, pastries and cakes. Secondly is to replace them and incorporate complex carbohydrates and whole grains such as legumes, brown rice, beans, fruits and

vegetables. And lastly, as a snack, you can incorporate nuts and seeds into your meals because they contain healthy fatty acids, micronutrients and fibres that can be a better alternative to replace carbohydrates.

Amelia: Now that we have listened to so many information and suggestions on carbs, fats, fibres and others... I would like to ask this on behalf of the listeners, is there a way for the patients to know or check if the food they are eating is actually good for them with an adequate amount of carbs, fats, or sodium?

Ceymone: Well, I would suggest there are two ways you can go for it. One is you can actually download healthcare apps. There are many healthcare apps out there. You can check it out and download where you can fill in the food or your daily intake and they actually show a breakdown of all the macronutrients and certain micronutrients that you can keep track of. Secondly, you can actually make an appointment with a dietician where a dietician will help you specifically and create an individualized diet plan suitable to your needs. So it is something that is tailored and customizable to your lifestyle, which is, I would say, is a much better approach where we can actually help you to tailor your meals according to what you normally like to eat and your lifestyle.

Gwynneth: Yeah, that's interesting! And we also know that dieticians play a main role here. So, I have also heard of a myth saying that having one or two glasses of red wine is good for the heart. Is this true?

Ceymone: They are rich in antioxidants and there have been research in finding out its potential benefits when it's being drunk in moderation. But, there is no solid evidence on this recommendation and most researches have included that there may be health benefits. So there is a 'maybe' there. There is still a need for further research, but from what I can share is that, it's better to take whole grapes and berries as they are a good source of antioxidants than red wine. Although there is a certain health risk link between you know - when you are drinking too much alcohol - so it's better to get your antioxidants from foods that are likely to be healthier than actually drinking wine.

Amelia: I see, so remember to drink moderately guys! What about supplements such as fish oils which contain omega 3 that are sold in the market? Would you recommend this to the patient? Is there any scientific evidence to support the statement?

Ceymone: There are proven benefits towards the intake of Omega 3 fish oil supplements. First of all, it does reduce the progression of heart blockage for individuals with heart disease, and it also reduces irregular heartbeats and lastly, it does show evidence that it lowers blood triglycerides levels. But when it comes to me recommending whether or not a person should eat, it really depends on how, whether the person can afford, or let's say it's inconvenient for you to eat whole foods, you can actually opt for Omega 3 supplements. But for someone who cannot consistently afford these supplements, you

can actually choose to consume whole foods that are high in Omega 3 fatty acids such as fish and seafood. So normally, I would recommend two servings of fish per week, and it's good enough. For example, having mackerel, salmon, herring, sardines, tuna. These are foods that are high in Omega 3 fatty acids.

Gwynneth: Alright! I think our interview has come to an end! Do you have any takeaway message for the audience?

Ceymone: Yes, so to those who are high at risk, I want everybody to remember the 3Cs : Check, Change and Control. For the first C, check your cholesterol levels. It is key to know the numbers. Change your diet and lifestyle to help to improve these levels. And lastly, control the cholesterol levels. How? You can always consult a doctor or a dietician for help. Healthy eating doesn't have to mean a strict diet or completely removing all your favourite foods. Because, based on our previous conversation, I was telling everyone to limit, limit, limit and you know, replacing, replacing - so, it's more like learning how to ditch the junk food and incorporate healthy and nutritional foods to fill your body needs. So, it is very important to change your relationship with food like eating in moderation. Know what are the foods that are good for your body. And make small changes in your daily meals. At the end, it is very important to work towards a healthy lifestyle. And, like my previous podcast, it is also very important to look at flexible eating with the 80/20 rule. Meaning, 80 percent of the time, you focus on consuming whole and natural foods, and 20 percent of the time, you give yourself that leeway to enjoy your favourite unhealthy food. Like I have mentioned before, it is not a scientifically proven ratio to provide the best health benefits, but it is the essence of the concept to build a flexible choice of food that you eat and also to build a healthy relationship with food. It is also important to know what food is beneficial for your body. And remember, diet is only one aspect of your overall health. Exercise, stress management, quality of sleep, hydration, lifestyles, smoking, family history are also the determinants that shape our lifestyle and health. It is a very complex interplay between the individual and the environment, but by understanding all these determinants, we can make those little changes and optimize them.

Amelia: Thank you so much for the explanations Ceymone! We are very much benefited from your sharing. We hope this episode has managed to give all the audience a better idea on the diet and its myths in relation to cardiovascular diseases. If you are interested to listen to more of our talks, please follow us on Spotify or iTunes! Do leave a comment or message on the Malaysian Medics International (MMI) page if you have questions for our speaker. Until the next episode everyone, goodbye!

Ceymone: Bye bye!