Clinics in Mother and Child Health

Review Article

Healthy Food for Pregnant Mother

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ABSTRACT

It is natural for women to be pregnant, but it full of risks. Food and diet influence greatly to the gestation, it can worthful supporting the pregnancy or in the opposite it can also destroy the mother and/or the foetus growing inside her. Healthy diet in time of pregnancy is very important. The amount shall meet to the requirement, the composition shall be balance and it has to be safe from anything harmful for the mother or the foetus. Some suggestions such as cooking all food, consuming more fresh food rather than processed and/or canned, avoiding alcohol and cigarette smoke and also limiting salt, simple sugar and seafood are very important to be followed.

Keywords: Healthy food; Diet; Pregnant women; Gestation

INTRODUCTION

Pregnancy is natural and normal among normal women, almost all women who are married want to have children. However, this is a high-risk event either to the mother as well as to the foetus inside her. The risk that occurs can be very mild, such as nausea and vomiting only, but it can also be severe that leads to death for both either the mother or the foetus she is carrying.

Nutrition can be a mitigating factor or in the opposite, it can increase the risk of the pregnancy. For example, a diet rich in simple sugars will quickly increase the weight of pregnant women and if not careful, it can cause obesity to the mother at all costs or the foetus will grow to be very large causing harmful effect to the mother [1,2].

Besides that, good nutrition that has been introduced prior to pregnancy up to the first 1000 days of life can guarantee to improve the quality of life of the foetus and baby who will born later. Chronic malnutrition in the early age in life, in the short term will interfere with brain growth, body (muscle and bone) growth and metabolic programming and If being left in the long term, in the future, it can be at risk of causing cognitive and educational disorders, impaired immune system and work capacity and besides that, it can also be the basis for the emergence of non-infectious diseases such as Diabetes and/or hypertension [3-6].

HEALTHY FOOD TOWARD HEALTHY DIET

Food is not for body but for mind, eyes, tongue, nose and may be ears. Human body does not recognize food but the nutrient composing the food. Once food is ingested, it will be broken down into nutrients that will nourish the body. Whether the amount is enough and how balances it is.

Therefore, whenever food will be consumed, people must think and calculate whether the nutrients contained in these foods will be able to provide adequate nutrition for body's needs [7,8].

To be said as healthy, food shall meet in two main requirements, i.e. it has to be healthy nutritionally and also has to be safe from anything counted as poison and/or pollution [7,9]. Within nutrition point of view healthy food shall be nutritionally adequate to meet the human need, the nutrition composition shall balance and the calorie shall in control. Adequate amount here means, pregnant and lactating mother shall eat foods to meet the need of two people, those are for the mother and also the developing foetus inside her. Since people do not eat same food continuously and there is not any super food containing all nutrient in enough amount, moderation and food variety shall be included [9-12].

Safe or namely food safety means foods do not contain substances that are harmful to body's health. Food, either from animal sources or from plants, can contain harmful substances from itself and/or being contaminated when it is produced, transported, processing or even when it is cook and/or being

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stored [13,14]. Therefore, food handler takes important role to the safety of the food.

THINGS HAPPENING IN PREGNANCY

When someone get pregnant, 2 big things are happening to this particular woman, firstly, some hormone will change and secondly, body size and composition will also change. These two are happening due to the occurrence of foetus in the whom [15]. The process of pregnancy is divided into three phases where each phase takes 3 monthlies, namely trimester. The first trimester is referred to as the formation phase, the second trimester is the phase of growth and the third trimester is called the maturation phase [16].

Weight must increase during pregnancy process. It is happening, 25% due to the presence of the foetus and the rest is about the changes of body composition and the presence of placenta. The increase in body weight will be looking significantly, especially in the second trimester of gestation, and the increment is getting less in the third trimester, whilst in the first trimester the increase of body weight shall not too expected [15,16].

HEALTHY FOOD FOR PREGNANT WOMAN

The main problem of food intake in the first trimester is the occurrence of morning sickness. In this condition mother often unable to consume food as much as it should be. Starting form the second trimester, mother feels a bit easier. Her appetite for food has returned but due to the enlargement of the womb, the mother cannot consume large amounts of food at once. So that the mother must consume her food in small portions but more often, and high quality of food especially in nutrient content is better than quantity.

Within this time, mother's weight has to increase significantly as the foetus grow very fast. Problem continue in the third trimester and mother still have to consume food in a small portion and body weight still increase but the speed shall not as high as the second trimester. Looking at this condition, pregnant mother shall eat more than before she gets pregnant [15,16].

The Recommended Daily Allowance (RDA) for any single nutrient during pregnancy is higher than that of her usual amount, but it is hardly difficult when it has to be transferred into portion of food. Even to keep the composition into balance is not easy when food is being considered [17-19].

Therefore, following to the portion suggested in the Food pyramid model, for Indonesian, it is called the Indonesian Cone Model and added with half up to double portion of each part daily might be enough to fill in the requirement of the pregnant mother. In addition, based on this model, balance diet will be also achieved [20,21]. In fact, there will be no food restriction during pregnancy except simple sugar, salt and alcohol. Those kinds of food shall be given in limitation as high consumption of sugar and salt produce more harmful effect rather than benefit [22-24]. To know that the mother has eaten enough food, she can have her nutrition status being measured. And this can be measured easily through upper arm circumference tool and/or body weight checked [12,25,26].

There are some suggestions for pregnant mother regarding to the healthiness of food she shall consume. Firstly, fresh food is better than processed or even canned. Often many food additives, preservatives, coloring agent are added in the processed food, though they claim and also has been approved by the FDA that food additive in those particular foods are safe, prevention is better than cure especially for pregnant mother, as most of us don't know what, in the long term, the side effect of those additives to the future baby [20,27]. Besides that, canned or processed food contain a lot of sugar or salt in it. Second, pregnant mother needs plenty of liquid. Drinking water or else is very important since it helps preventing and avoiding dehydration [28-30].

Drinking 2600 ml of liquid may be good for pregnant mother [28]. Yet alcohol, if possible, shall be avoided during pregnancy, as highly alcohol consumption during gestation is correlates closely to gestational outcomes such as low birth weight baby [24]. Cigarette smoking includes passive smoker need to be avoid either, because contents in cigarette smoke influence negatively to the gestation [31,32].

Third, there is growing evidence that many sea foods are contaminated by heavy metal and many plant base foods are sprayed with insecticide. Eating in limitation of fish and seafood and wash all plant base foods well with water before cooking it are worthwhile [33-35]. Fourth, food consumed during gestation must be well cooked. Often food material such as eggs and/or milk often contaminated by virus and/or bacteria. Consuming raw food such as raw milk will cause harmful effect to the mother even her gestation too [36].

Fifth, on top of it, because pregnant mother often on risk of hidden nutrient insufficiency or even deficiency, such as Iodine, Iron, Essential fat (omega group), Calcium, supplementation of those particular nutrients or even multivitamin and minerals are worthful [37-40]. Though Vitamin A and vitamin D supplementation alone are still on debate, supplementation may need special precaution since it has potential side effect to the off spring in the future [41].

CONCLUSION

Pregnancy is normal and natural, but full of risks to the mother and the foetus inside her. Nutrition has two sides; in one way it supports the process of gestation or in the other way it causes harmful effect either to the mother as well as the foetus growing inside her.

Healthy diet discusses the amount of food that meet to the need of a pregnant mother, balance composition which follow to the food pyramid guideline and food safety which means that foods do not containing materials that bring harmful effect to the mother and then impacting to the gestation and/or the foetus.

Some limitations need to be considered such as too much salts, sugars especially simple sugars. There are five suggestions to add on healthy diet for pregnant mother such as fresh food consumption, the need for drinking water, avoid alcohol and cigarette smoking, limiting sea food consumption, and cook well the food before consumption and supplementation.

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